D. AIR QUALITY ASSESSMENT

AIR QUALITY ANALYSIS

WILLOW ROAD EXTENSION/U.S. 101 INTERCHANGE PROJECT

Prepared for:

County of San Luis Obispo
Department of Public Works
County Government Center, Room 207
San Luis Obispo, California 93408

Under contract to:

Rajappan & Meyer Consulting Engineers Inc.
1038 Leigh Avenue, Suite 100
San Jose, California 95126

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

LSA

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1.0 EXECUTIVE SUMMARY

The County of San Luis Obispo (County) proposes to construct the extension of Willow Road and connect it with U.S. Route 101 (US 101) in the Community of Nipomo in south San Luis Obispo County. The proposed project includes the extension of Willow Road east from its existing terminus approximately 1000 feet west of Pomeroy Road to Thompson Avenue, construction of a frontage road between Willow Road and Sandydale Drive, and construction of a new US 101/Willow Road interchange between post mile (PM) 5.75 and PM 6.0. The County is the lead agency for environmental approval under the California Environmental Quality Act (CEQA).

This air quality analysis provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The analysis provides data on existing air quality, evaluates potential air quality impacts associated with the proposed project, and identifies mitigation measures. Modeled air quality levels are based on vehicle data generated by Fehr and Peers Associates, Inc. (October 2003).

Historical air quality data show that existing carbon monoxide (CO) levels for the project area and the general vicinity do not exceed either the state or federal ambient air quality standards. The proposed project will help to improve traffic flow and reduce congestion on roadway links in the project vicinity. The project is located in an attainment area for federal CO standards. Using the Caltrans Transportation Project-Level Carbon Monoxide Protocol, a screening and a CO hot spot analysis was conducted to determine if the proposed project would result in any CO hot spots. By estimating the CO levels in the project area, it was determined that the proposed project will not result in any exceedences of the one-hour or eight-hour CO standards.

Compliance with San Luis Obispo County Air Pollution Control District (SLOCAPCD) Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions. Because the proposed interchange improvement project does not generate new regional vehicular trips, no new regional vehicular emissions would occur. The proposed project may have a beneficial effect in helping to reduce congestion on roadway links in the project vicinity.

It is not expected that implementation of this project will cause a significant increase of toxic air constituents. In fact, since motor vehicles produce more exhaust per kilometer at slower speeds and this project will reduce traffic slow-downs, the effect of this project should be to reduce emissions per kilometer and therefore the population's exposure to toxic constituents from vehicle exhaust.

The project is located in San Luis Obispo County, which is among the counties listed as containing serpentine and ultramafic rock. However, a general location guide[1] shows that no areas of naturally occurring asbestos are located in the project vicinity. Therefore, the impact from naturally occurring asbestos (NOA) during project construction would be minimal to none.

[1] A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos, Department of Conservation, Division of Mines and Geology, State of California, August 2000. (ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf)

2.0 INTRODUCTION

The County of San Luis Obispo (County) proposes to construct the extension of Willow Road and connect it with U.S. Route 101 (US 101) in the town of Nipomo, south San Luis Obispo County. The proposed project includes the extension of Willow Road east from its existing terminus approximately 1000 feet west of Pomeroy Road to Thompson Avenue, construction of a frontage road between Willow Road and Sandydale Drive, and construction of a new US 101/Willow Road interchange between postmile (PM) 5.75 and PM 6.0. The County is the Lead Agency for environmental approval under the California Environmental Quality Act (CEQA). The proposed project's regional location and project vicinity are shown in Figure 1. The description of the existing condition (No Project/No Build Alternative) and the conceptual improvement plans for the proposed project are provided in Appendix A.

Funding sources for the extension of Willow Road and the frontage road include local development fees and other local monies. Funding sources for the construction of the interchange include local development fees, other local monies, and State Transportation Improvement Program (STIP) funds. The proposed extension of Willow Road and the interchange are identified in the San Luis Obispo Council of Government's (SLOCOG) Regional Transportation Plan (RTP) as a major proposed short-term project and in the Circulation Element of the County General Plan and the 1994/1995 South County Circulation Study.[1] The Willow Road interchange is listed in SLOCOG's Regional Transportation Improvement Program (RTIP) (Project ID #4745).

2.1 GOALS AND OBJECTIVES

The primary goal of the proposed project is to provide a new direct connection between State Route 1 (SR-1) and US 101. In doing so, the proposed project will also achieve the following objectives:

- Relieve traffic congestion in order to improve traffic flow and levels of service (LOS) at the US 101 interchanges at Tefft Street and Los Berros Road;
- Provide circulation improvements to support planned land uses as identified in the South County Area Plan;
- Reduce future traffic levels on Los Berros Road, West Tefft Street, and Pomeroy Road;
- Reduce travel length and time in the Nipomo area;
- Reduce the need for major modification of the US 101/Tefft Street and Los Berros-Thompson Road interchanges;
- Improve traffic safety by diverting future traffic from nonstandard County roadways to a full standard roadway;
- Provide enhanced emergency access to the residents and businesses of the Nipomo area through the provision of an alternative east-west access and a connection to US 101;
- Provide a new recreational trail from Thompson Avenue to SR-1, improving access to the coastal zone

[1] Willow Road Extension Draft EIR, pg. V-24, March 1999.

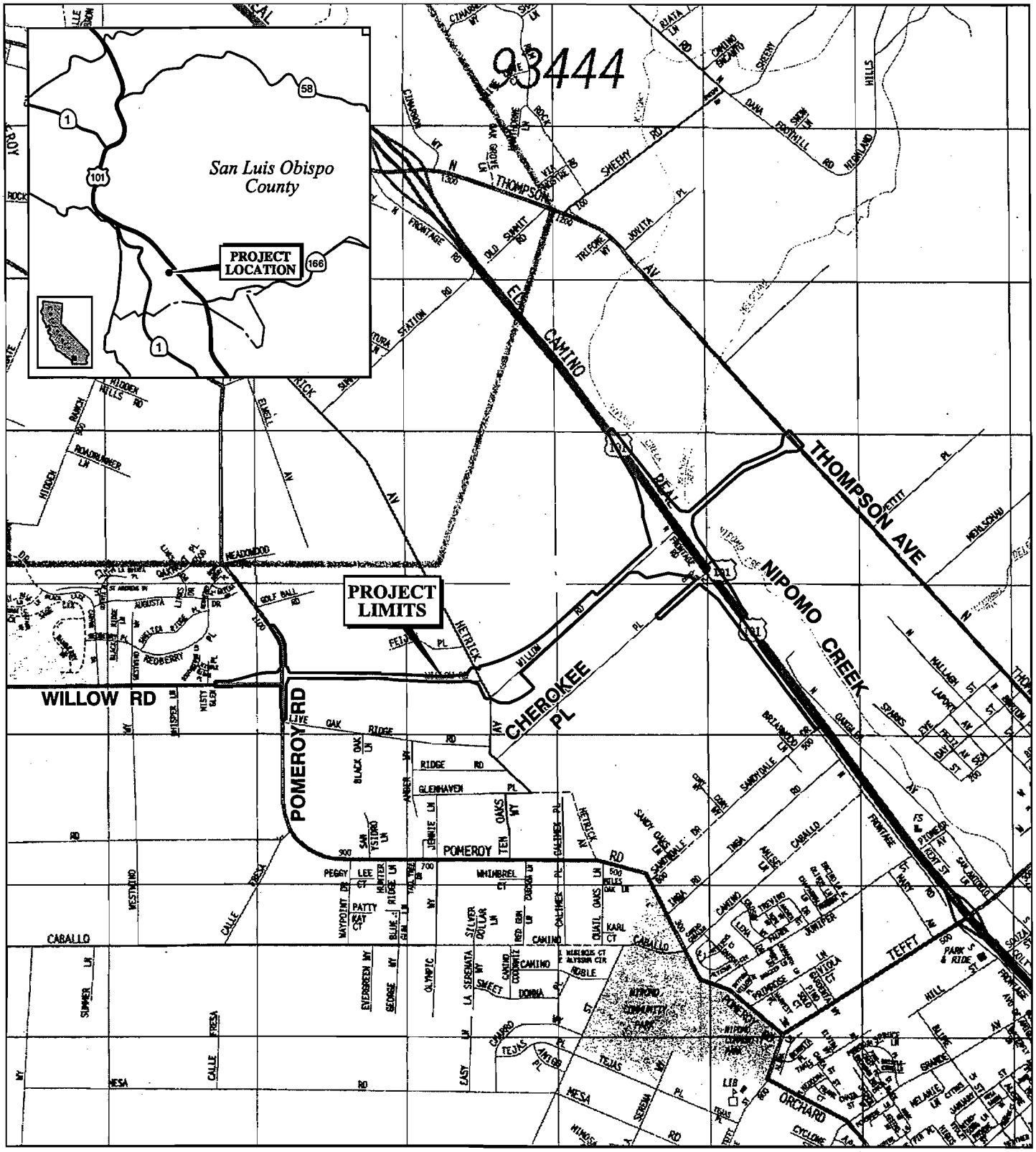

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FIGURE 1

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0 1200 2400
FEET

SOURCE: THE THOMAS GUIDE

Willow Road Extension/U.S. 101 Interchange

Project Location

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The proposed project is needed to accommodate the projected population growth in the Nipomo area. The Nipomo area is served by three existing interchanges on US 101, including Los Berros-Thompson Road, Tefft Street, and Hutton Road (State Route 166 [SR-166]). Over the past decade, traffic modeling of the Nipomo area has shown that the existing Tefft Street interchange is and will continue to be inadequate to serve projected development during peak traffic periods, subjecting the public to recurring congestion and delay as well as increasing traffic on the existing local street network. Of the three existing interchanges, only the Tefft Street interchange is located centrally to existing and planned developments. Los Berros-Thompson Road and Hutton Road (SR-166) are relatively remote to serve area traffic, and the existing street network does not provide direct connections to any of the three existing interchanges.

The purpose of the proposed project is to provide a new direct connection between SR-1 and US 101. The proposed project will allow the County to concentrate limited funds on providing a transportation improvement that will lessen the impacts to the existing roadway network as the area continues to develop. The new link between US 101 west to the Black Lake-Calendar area will provide substantial benefits in local traffic circulation, including a reduction in future vehicle miles traveled on the Nipomo Mesa and reduced traffic loads on nonstandard roadways. The improvement will also provide a direct route to several developed or approved Specific Plans in south County, such as Cypress Ridge, Black Lake, and Woodlands.

3.0 PROJECT DESCRIPTION

3.1 NO PROJECT/NO BUILD ALTERNATIVE

No improvements to the existing roadway network would be made as part of the No Project/No Build Alternative other than routine roadway maintenance within the project area. The No Project/No Build Alternative assumes implementation of other improvements identified in the 1994/1995 South County Circulation Study.

3.2 PROPOSED PROJECT

3.2.1 Extension of Willow Road

The proposed extension of Willow Road begins approximately 1,000 feet west of Pomeroy Road, running east and northeast approximately 2.5 miles to its termination at Thompson Road, located east of US 101. The Willow Road extension will be a two-lane roadway (one lane in each direction) within a 100-foot right-of-way to accommodate a 40-foot-wide roadway with two 12-foot travel lanes, a 14-foot-wide center turn (auxiliary) lane in selected areas, two 8-foot shoulders, and an 8-foot area set aside for a future equestrian path.

Local access to the proposed Willow Road extension will be via local roadways and limited driveway access. A center turn (auxiliary) lane will be provided at the intersections with Pomeroy Road, Hetrick Avenue, Thompson Road, the proposed frontage road west of US 101, and the proposed US 101/Willow Road interchange ramps. Based upon future project traffic generation from the build out of the area's land use plan, the roadway is expected to carry over 15,000 trips per day and will have a minimum design speed of 55 miles per hour. No substantive changes to the configuration of the existing segments of Willow Road are anticipated except at its connection with Hetrick Road. Improvements planned for Pomeroy Road where it intersects with Willow Road include widening of Pomeroy (both the north and south legs of the intersection) to accommodate left turn lanes, two travel lanes, and shoulders on both sides of the road. The left turn segment of each leg will be approximately 250 feet in length. A two-lane bridge is proposed to be constructed at the crossing of Willow Road over Nipomo Creek, east of US 101.

3.2.2 US 101/Willow Road Interchange

An interchange is proposed where the extension of Willow Road would cross US 101, between US 101 Post Mile (PM) 5.75 and PM 6.0. The interchange will be constructed as an undercrossing and includes the construction of two two-lane concrete bridges to carry northbound and southbound US 101 traffic over Willow Road, approach slabs, and on- and off-ramps. The interchange will be constructed to accommodate any future widening of US 101 to six lanes and Willow Road to four lanes, as well as the 8 foot set-aside for a future equestrian trail.

3.2.3 Frontage Road

The proposed frontage road, with a 60 foot right-of-way, between Willow Road and Sandydale Drive is proposed to be located adjacent to the US 101 right-of-way. The new 0.8-mile roadway will be located within a 60-foot right-of-way to accommodate a 40-foot-wide two-lane roadway with two 12-foot travel lanes and two 8-foot bicycle lanes.

3.2.4 Park and Ride Facility

The southwest quadrant of the proposed future interchange at US 101/Willow Road, outside of the southbound on-ramp, is the proposed location for a future park and ride facility. The park and ride lot would provide approximately 50 spaces and will include a bus drop-off area and bicycle racks.

3.2.5 Infiltration Basins

The proposed extension of Willow Road will add an additional 2.5 miles of roadway between Pomeroy Road and Thompson Road, in addition to 0.8 mile of frontage road between the new extension of Willow Road and Sandydale Drive. This new roadway will not only add to the volume of runoff to the current drainage systems due to the imperviousness of the asphalt, but it will also essentially bisect natural drainage basins, thus causing a man-made barrier to natural runoff. The County dictates in its Standard Specifications Manual that all runoff caused by impervious bituminous asphalt must be routed into infiltration basins to ultimately be absorbed by the soil. The remaining natural runoff must be routed across the proposed roadway and is to continue downgrade on its current course. Infiltration basins will serve to capture and dispose of the natural runoff caused by precipitation on the new asphalt so as to not affect the natural drainage patterns.

Two separate basins along the Willow Road alignment are required to accommodate the increased runoff. Each basin has distinct design characteristics, and therefore each basin has a unique configuration. The depth of the infiltration basins will be up to two feet with 5:1 sideslopes.

Drainage swales will be provided along the extended segment of Willow Road, at the interchange, and at the frontage road north of Sandydale Drive. The swales will perform similar functions as detention basins. Buffer strips off the edge of pavement will be earthen and vegetated with native grasses. The native vegetation will be designed to capture the oils and fluids from the roadway surface runoff during storm events.

3.2.6 Cherokee Place

The project also includes the construction of Cherokee Place east for a distance of 1,000 feet to connect with the proposed frontage road west of US 101. Cherokee Place will be graded and paved to meet County standards. The proposed roadway is shown in Figure 1, Project Location.

4.0 SETTING

4.1 REGIONAL CLIMATE AND AIR QUALITY

A region's topographic features have a direct correlation with air pollution flow; therefore, they are used by the California Air Resources Board (ARB) to determine the boundary of air basins. A local air district is then formed for each air basin; the district is responsible for providing air quality strategies to bring the air basin into compliance with the National Ambient Air Quality Standards (NAAQS).

The project site is located in the Community of Nipomo, an area within the South Central Coast Air Basin (SCCAB) that includes San Luis Obispo, Santa Barbara, and Ventura Counties. Air quality regulation in the project region of the SCCAB is administered by the SLOCAPCD, a regional agency created for the SCCAB.

The climate of San Luis Obispo County can be characterized as Mediterranean, with warm, dry summers and cooler, damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland. The climatological station closest to the site that monitors temperature is the Santa Maria Airport Station.[1] The annual average maximum temperature recorded at this station is 20.4°C (68.7°F), and the annual average minimum is 7.7°C (45.8°F). January is typically the coldest month in this area of the SCCAB.

Regional meteorology is largely dominated by a persistent high pressure area that commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland.

From November through April, the Pacific High tends to migrate south, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably around the county. In the coastal plain, annual rainfall varies from 41 to 71 cm (16 to 28 inches), while the Upper Salinas River Valley generally receives 30 to 51 cm (12 to 20 inches). The Carrizo Plain is the driest area of the county, with less than 30 cm (12 inches) of rain in a typical year. The climatological station closest to the site that monitors

[1] Western Regional Climatic Center. 2003. http://www.wrcc.dri.edu (accessed October 14, 2003).

precipitation is the Santa Maria Airport Station. Average rainfall measured at this station varied from 6.93 cm (2.73 inches) in February to 1.17 cm (0.46 inch) or less between May and October, with an average annual total of 32.72 cm (12.88 inches). Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze.

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, trapping pollutants near the surface.

This effect is intensified when the Pacific High weakens or moves inland. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime seabreeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the post-Santa Ana condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county.

4.1.1 Air Pollution Constituents

Pursuant to the federal Clean Air Act (CAA) of 1970, the U.S. Environmental Protection Agency (EPA) established 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 ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (e.g., impairment of visibility, damage to vegetation and property).

The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulates less than 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). The EPA established new national air quality standards for ground-level ozone and for fine particulate matter (particulate matter 2.5 microns or less in diameter, or $PM_{2.5}$) in 1997. On May 14, 1999, the U.S. Court of Appeals (USCA) for the District of Columbia Circuit found that the Clean Air Act, which the EPA relied on in formulating the new NAAQS, "effects an unconstitutional delegation of legislative power." On February 27, 2001, the U.S. 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 ozone and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new ozone 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 & Budget (OMB) to implement the 8-hour ground-level ozone standard. The EPA issued the proposed rule implementing the 8-hour ozone standard in April 2003, and plans to issue the final rule implementing the 8-hour ozone standard in December 2003. The EPA is required by court order to complete final 8-hour ozone nonattainment status by April 15, 2004.

The EPA plans to propose a $PM_{2.5}$ implementation rule in fall 2003 and issue the final $PM_{2.5}$ implementation rule in September 2004. The EPA is then expected to make final designations on December 15, 2004.

The $PM_{2.5}$ standard complements existing national and state ambient air quality standards that target the full range of inhalable PM_{10}. The ARB and local air districts are developing Air Quality Attainment Plans (AQAPs) for incorporation into State Implementation Plans (SIPs) to reduce unhealthful levels of $PM_{2.5}$ in areas violating the new federal standards. The primary standards for these pollutants are shown in Table A, and the health effects from exposure to the criteria pollutants are described later in this section.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and state air quality regulating agencies. Data collected at permanent monitoring stations are used by the EPA to identify 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. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and extreme, are used to classify each air basin in a state on a pollutant by pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS.

The region is classified as follows:

1-hour Ozone:	Attainment for both federal and State standards.
8-hour Ozone:	Preliminary attainment for federal standards.
PM_{10}:	Attainment for federal standards, nonattainment for State standards.
$PM_{2.5}$:	Preliminary nonattainment for federal standards.
CO:	Attainment for both federal and State standards.
NO_2:	Attainment for both federal and State standards.

The area is attainment or unclassified for all other pollutants under state and federal air quality standards.

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[2,5]	Secondary[2,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 $\mu g/m^3$)	Ultraviolet Photometry	0.12 ppm (235 $\mu g/m^3$)[8]	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	–		0.08 ppm (157 $\mu g/m^3$)		
Respirable Particulate Matter (PM_{10})	24-Hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation*	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$*		50 $\mu g/m^3$		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		65 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$*	Gravimetric or Beta Attenuation*	15 $\mu g/m^3$		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Nondispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m_3)	None	Nondispersive 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	–	Gas Phase Chemiluminescence	0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (470 $\mu g/m^3$)		–		
Lead	30-day average	1.5 $\mu g/m^3$	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 $\mu g/m^3$	Same as Primary Standard	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 $\mu g/m^3$)	–	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (365 $\mu g/m^3$)	–	
	3-Hour	–		–	0.5 ppm (1300 $\mu g/m^3$)	
	1-Hour	0.25 ppm (655 $\mu g/m^3$)		–	–	
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 $\mu g/m^3$	Ion Chromatography*			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 $\mu g/m^3$)	Ultraviolet Fluorescence			
Vinyl Cloride[9]	24-Hour	0.01 ppm (26 $\mu g/m^3$)	Gas Chromatography			

Source: ARB (July 2003).

Footnotes:

1 California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1 and 24 hour); nitrogen dioxide; suspended particulate matter, PM_{10}; and visibility-reducing particles are values 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 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. 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 that can be shown to the satisfaction of the 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 New federal eight-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.

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.

Ozone

Ozone (smog) is formed by photochemical reactions between oxides of nitrogen and reactive organic gases rather than being directly emitted. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.

Carbon Monoxide

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. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Nitrogen Oxides

Nitrogen dioxide (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. Nitrogen oxides contribute to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_X is a primary component of the photochemical smog reaction. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide

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 in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Reactive Organic Gases

Reactive organic gases (ROG) are formed from combustion of fuels and evaporation of organic solvents. ROG is a prime component of the photochemical smog reaction. Consequently, ROG accumulates in the atmosphere much quicker during the winter when sunlight is limited and photochemical reactions are slower.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are larger than 2.5 microns but smaller than 10 microns, or PM_{10}. $PM_{2.5}$ refers to fine suspended particulate matter with an aerodynamic diameter of 2.5 microns or less that is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as by-products of fuel combustion through abrasion, such as tire or brake lining wear, or through

fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

4.2 LOCAL AIR QUALITY

The site is located within SLOCAPCD jurisdiction. The SLOCAPCD maintains ambient air quality monitoring stations throughout the SCCAB. The Nipomo Regional Park air quality monitoring station monitors four of the criteria pollutants: ozone, NO_2, SO_2, and PM_{10} (see Table B). The closest monitoring station with CO and $PM_{2.5}$ data is the Santa Maria station. Air quality trends identified from data collected at both air quality monitoring stations between 1998 and 2002 are listed in Table B and are discussed below. From the ambient air quality data listed, it can be seen that CO levels have not exceeded the relevant federal or state standards in the past three years (prior to 2000 CO concentrations were not monitored at this station). Ozone levels in the proposed project area did not exceed the federal and state standard in the past five years. The PM_{10} level in the proposed project area exceeded the state standard from 1 to 3 days per year in the past five years and never exceeded the federal PM_{10} standard in the past five years. The $PM_{2.5}$ levels did not exceed the federal standard in the five years (there is no state standard for $PM_{2.5}$). The nitrogen dioxide level in the proposed project area did not exceed the federal or state standard in the past five years. The sulfur dioxide level in the proposed project area did not exceed the federal or state standard in the past five years.

4.3 REGIONAL AIR QUALITY PLANS

The 1976 Lewis Air Quality Management Act established the SLOCAPCD and other air districts throughout the State. The federal Clean Air Act 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 coordinates and oversees both state and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for federal EPA approval. The ARB maintains air quality monitoring stations throughout the State in conjunction with local air districts. Data collected at these stations are used by the ARB to classify air basins as "attainment" or "nonattainment" with respect to each pollutant and to monitor progress in attaining air quality standards. The ARB has divided the State into 15 air basins. Significant authority for air quality control within the air basins has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

The California Clean Air Act (CCAA) provides the SLOCAPCD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles at an intersection, at a mall, and on highways. As a State agency, the ARB regulates motor vehicles and fuels for their emissions.

Table B: Ambient Air Quality at the Nipomo Regional Park Air Monitoring Station

Pollutant	Standard	2002	2001	2000	1999	1998
Carbon Monoxide[1]						
Max 1-hr concentration (ppm)		3.1	3.5	4.0	Not monitored	
No. days exceeded: State	> 20 ppm/1-hr	0	0	0	--	--
Federal	> 35 ppm/1-hr	0	0	0	--	--
Max 8-hr concentration (ppm)		1.2	1.3	2.1	Not monitored	
No. days exceeded: State	≥ 9.0 ppm/8-hr	0	0	0	--	--
Federal	≥ 9 ppm/8-hr	0	0	0	--	--
Ozone						
Max 1-hr concentration (ppm)		0.080	0.085	0.078	0.089	0.057
No. days exceeded: State	> 0.09 ppm/1-hr	0	0	0	0	0
Federal	> 0.12 ppm/1-hr	0	0	0	0	0
Max 8-hr concentration (ppm)		0.069	0.080	0.066	0.076	0.050
No. days exceeded: Federal	> 0.08 ppm/8-hr	0	0	0	0	0
Particulates (PM_{10})						
Max 24-hr concentration (ppm)		55	64	113	41	27
No. days exceeded: State	> 50 $\mu g/m^3$	2	3	1	0	0
Federal	> 150 $\mu g/m^3$	0	0	0	0	0
Annual geometric average concentration		19	20	18	14	15
Annual arithmetic average concentration		20	24	21	17	10
No. days exceeded: State	> 20 $\mu g/m^3$ geo. avg	0	0	0	0	0
Federal	> 50 $\mu g/m^3$ arith. avg	0	0	0	0	0
Particulates ($PM_{2.5}$)[1]						
Max 24-hr concentration (ppm)		21.3	43.2	28.7	24.3	NM[2]
No. days exceeded: Federal	> 65 $\mu g/m^3$	0	0	0	0	--
Annual avg. concentration		9.6	10.4	9.8	11.5	NM
No. days exceeded: State	> 12 $\mu g/m^3$ annual avg	0	0	0	0	--
Federal	> 15 $\mu g/m^3$ annual avg	0	0	0	0	--
Nitrogen Dioxide						
Max 1-hr concentration (ppm)		0.047	0.042	0.043	0.067	0.041
No. days exceeded: State	> 0.25 ppm/1-hr	0	0	0	0	0
Annual avg. concentration		0.005	NM	0.006	0.007	NM
No. days exceeded: Federal	0.053 ppm annual avg	0	--	0	0	--
Sulfur Dioxide						
Max 1-hr concentration (ppm)		0.065	0.059	0.140	0.117	0.052
No. days exceeded: State	> 0.25 ppm/1-hr	0	0	0	0	0
Max 3-hr concentration (ppm)		0.037	0.040	0.083	0.039	0.028
No. days exceeded: Federal	> 0.5 ppm/3-hr	0	0	0	0	0
Max 24-hr concentration (ppm)		0.014	0.014	0.016	0.013	0.008
No. days exceeded: State	> 0.04 ppm/24-hr	0	0	0	0	0
Federal	> 0.14 ppm/24-hr	0	0	0	0	0
Annual avg. concentration		0.004	0.003	0.003	0.002	0.003
No. days exceeded: Federal	0.053 ppm annual avg.	0	0	0	0	0

Source: EPA and ARB 1998 to 2002

1 Carbon monoxide (CO) and $PM_{2.5}$ data are from the Santa Maria station because CO and $PM_{2.5}$ are not monitored at the Nipomo Regional Park station.

2 NM = Not monitored

Regional Clean Air Plan

The SLOCAPCD and the San Luis Obispo Council of Governments (SLOCOG) are responsible for formulating and implementing the Clean Air Plan (CAP) for the SCCAB. The 2001 CAP, adopted by the Air Pollution Control Board at its hearing on March 26, 2002, addresses state requirements by updating the 1991 CAP. The 1991 CAP, which was adopted by the SLOCAPCD in 1992, contained a comprehensive set of control measures designed to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. The 1995 CAP was an extensive update of the 1991 Plan, but with fewer control strategies recommended for adoption because of changes in State law. The 2001 CAP, similar to the 1998 CAP, is mainly a continuation of the 1995 Plan and proposes no new control measures.

In 1989, San Luis Obispo County was designated as nonattainment with the state health based standard for ozone. Ozone forming pollutants throughout San Luis Obispo County have been significantly reduced since that time. For the years 2000 through 2002, no violations of the State hourly ozone standard (0.09 ppm) were measured at any of the six community-based monitoring stations in SLO County. Based upon that record, the ARB re-designated the County as attainment with the state health based ozone standard in January 2004.

Slowing the rate of growth in the use of private vehicles is a major goal of this Plan. Substantial reductions in these trips cannot be achieved, however, without adequate transportation alternatives. Implementation of adopted transportation control measures is ongoing and will continue to provide mobile source emission reductions necessary to achieve State air control standards. The traffic control measure focuses on traffic flow improvements and traffic calming. Traffic calming refers to a full range of methods designed to improve the flow of non-motorized transportation by slowing motorized traffic. Traffic calming is generally used in residential areas on non-arterial local streets and roads.

The goal of this measure is to improve the road system and infrastructure in a way that increases its efficiency, reduces emissions, and supports the other transportation control measures in the plan. Traffic flow improvements help keep traffic moving smoothly during peak hours when the road system is near its capacity, such as during commute periods or on holidays. Peak hour traffic management should also increase pedestrian and bicyclist safety.

4.4 METHODOLOGY

This air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed project. Long-term mobile emissions associated with the proposed project would be less than no project due to improved traffic flow in the project area, with the same projected future trips in the project vicinity. However, emissions reductions associated with such improvements are difficult to quantify. Therefore, no emissions calculations are provided in this analysis for regional vehicular emissions.

Carbon Monoxide (CO) Hot Spot

The CALINE4 model is used to assess air quality impacts near transportation facilities. This air quality model estimates the CO concentration near interchanges or roadway segments based on traffic volume, roadway geometry, topography, and meteorological data. CO concentrations at sensitive receptor locations are used to determine the significance of impacts on air quality. Sensitive receptor locations are areas accessible to the general public such as sidewalks, retirement homes, hospitals, schools, and residential property lines. The closest receptor locations are used to determine the significance of localized air quality impact. Both No Build and Build Alternatives were analyzed using the same receptor locations, for consistency, to assess the impact on local air quality.

The ARB emission factor model, EMFAC2002, was used to generate the composite CO emission factors in the project area. EMFAC2002 is a vehicle emission factor model used only in California. The model was run using the vehicle fleet mix in the general project vicinity to provide composite emission factors for use in the CALINE4 model. The vehicle fleet mix is an important variable in the calculation of emission factors because each category of vehicles emits a different amount of pollutant; for example, the heavy-duty diesel trucks emit much more pollutants than a regular passenger vehicle. The results from CALINE4 are used to determine the project's impact on local air quality.

Diesel Toxics Analysis

Currently, no federal project-level requirements exist for air toxics analysis, and the California Environmental Quality Act (CEQA) only requires a consideration of the risks from toxics but provides no guidance or quantitative analysis method. This air quality analysis discusses the risks from diesel particulate matter (PM) exhaust, which poses the greatest cancer risks among all identified air toxics and is also the area of highest public concern. The project's potential air toxics impact is also discussed.

4.5 THRESHOLDS OF SIGNIFICANCE

Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SLOCAPCD's CEQA Air Quality Handbook. The District has established the following four separate categories of evaluation for determining the significance of project impacts:

1. Comparison of calculated project emissions to District emission thresholds;
2. Consistency with the most recent Clean Air Plan (CAP) for San Luis Obispo County;
3. Comparison of predicted ambient pollutant concentrations resulting from the project to State and federal health standards, when applicable; and
4. The evaluation of special conditions that apply to certain projects.

Full disclosure of the potential air pollutant and/or toxic air emissions from a project is needed for these evaluations, as required by CEQA.

Thresholds for Construction Emissions

Mitigation of construction activities is required when the following emission thresholds are equaled or exceeded by both fugitive and combustion emissions.

SLOCAPCD retains the discretion to require mitigation for projects that will not exceed the mitigation thresholds if those projects will result in special circumstances, such as the release of diesel PM emissions near sensitive receptors.

Table C: Level of Construction Activity Requiring Mitigation

Pollutant of Concern	Thresholds[1]			Mitigation Measures
	Tons/Qtr		Lbs/Day	
ROG	2.5	or	185	Requires CBACT[2]
	6.0			Requires CBACT plus further mitigation, including emission offsets
NO_X	2.5	or	185	Requires CBACT
	6.0			Requires CBACT plus further mitigation, including emission offsets
PM_{10}	2.5			Any project with a grading area greater than 4.0 acres of continuously worked area will exceed the 2.5-ton PM_{10} quarterly threshold. Combustion emissions should also be calculated based on the amount of cut and fill expected.

Projects in the SCCAB with construction-related emissions that exceed any of the emission thresholds (daily or quarterly) above are considered significant by the SLOCAPCD. For purposes of this analysis, a PM_{10} threshold of 75 lbs/day has been calculated, using three months per quarter and 22 days per month.

Thresholds for Operational Emissions

The threshold criteria established by the District to determine the significance and appropriate mitigation level for long-term emissions from a project are presented in Table D. Emissions that equal or exceed the designated threshold levels are considered potentially significant and should be mitigated. As shown in the table, the level of analysis and mitigation recommended follow a tiered approach based on the overall emissions generated by the project.

1 Thresholds were approximated using the screening level emission rates from the SLOCAPCD CEQA Handbook, Table 6-2. Daily emission thresholds are based upon the level of daily emissions that may result in a short-term exceedance of the ozone standard.

2 CBACT = Best Available Control Technology for Construction equipment.

Table D: Thresholds of Significance for Operational Emissions Impacts

Pollutant		Tier 1	Tier 2	Tier 3
ROG, NO_X, SO_2, PM_{10}	< 10 lbs/day	10 lbs/day	25 lbs/day	25 tons/year
CO	< 550 lbs/day		550 lbs/day	
Significance	Insignificant	Potentially Significant Impacts	Significant Impacts	Significant Impacts
Environmental Document	Negative Declaration (ND)	Mitigated ND	Mitigated ND or EIR	EIR

Less than 10 lbs/day of ROG, NO_X, SO_2, PM_{10} or less than 550 lbs/day of CO. There are no significant air quality impacts associated with a project. Thus, mitigation measures are not required; any development strategies described in the CEQA Handbook that are integrated into the project would be considered a project benefit. A Negative Declaration should be prepared.

Tier 1: 10–24 lbs/day of ROG, NO_X, SO_2, PM_{10}. Any project which has the potential to exceed the Tier 1 threshold has the potential to cause significant air quality impacts, and should be submitted to the District for review. On-site mitigation measures, following the guidelines in the CEQA Handbook, are recommended to reduce air quality impacts to a level of insignificance. A Mitigated Negative Declaration should be prepared.

Tier 2: Greater than or equal to 25 lbs/day or more of ROG, NO_X, SO_2, PM_{10} or greater than or equal to 550 lbs/day of CO. If all feasible mitigation measures are incorporated into the project and emissions can be reduced to less than the Tier 2 threshold, then a Mitigated Negative Declaration may be prepared.

If all feasible mitigation measures are incorporated into the project and emissions are still greater than the Tier 2 threshold, then an Environmental Impact Report should be prepared. Additional mitigation measures, including off-site mitigation, may be required depending on the level and scope of air quality impacts identified in the EIR.

For CO, emission levels equal to or exceeding 550 lbs/day should be modeled to determine their significance.

Tier 3: 25 tons/year or more of Emissions. If emissions from a project will exceed the Tier 3 threshold, an Environmental Impact Report should be prepared. Depending on the level and scope of air quality impacts identified in the EIR, mitigation measures, including off-site mitigation measures, may be required to reduce the overall air quality impacts of the project to a level of insignificance.

5.0 IMPACTS

Air pollutant emissions associated with the proposed project would occur over the short term from construction, such as fugitive dust from grading/site preparation and equipment exhaust. Long-term emissions would improve from the enhanced traffic flow due to the interchange improvements. The objective of the proposed project is to lessen traffic congestion and improve public safety. The proposed interchange improvement project is not expected to generate any additional traffic. Regional traffic trips would remain similar. Therefore, no new long-term regional emissions would result from implementation of the proposed project. The proposed project will improve traffic movement in the project vicinity, thereby lowering the total pollutants emitted by motor vehicles. The following discusses the possible emissions-generating activities associated with the proposed project.

LONG-TERM MICROSCALE PROJECTIONS

Since the project will add new roadways, a CO hot spot analysis was conducted for localized air quality impact analysis.

Carbon Monoxide (CO) Hot Spots

Caltrans has developed a Transportation Project-Level Carbon Monoxide Protocol (Protocol) (December 1997) for assessing CO impacts of transportation projects. The procedures and guidelines comply with the following regulations without imposing additional requirements: Section 176(c) of the 1990 CAA Amendments, federal conformity rules, State and local adoptions of the federal conformity rules, the National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA) requirements [California Code of Regulations title 21§1509.3(25)].

Two conformity-requirement decision flow charts are provided in the Protocol and are provided as Appendix A. An explanatory discussion of the steps (as identified in Figure 1 of the Protocol, Requirements for New Projects) used to determine the conformity requirements that apply to new projects is provided below.

3.1.1 Is the project exempt from all emissions analyses? (See Table 1 of Protocol.) **NO.** The proposed project is not exempt from all emissions analyses.

3.1.2 Is the project exempt from regional emissions analysis? (See Table 2 of Protocol.) **NO.** Although the project is an interchange reconfiguration project, it includes additional through lanes on Willow Road. Therefore, it is not exempt for regional emissions analysis.

3.1.3 Is the project locally defined as regionally significant? **YES.** As mentioned above, the proposed project will increase the number of through lanes on Willow Road. Therefore, the project is potentially significant.

3.1.4 Is the project in a federal attainment area? **YES.**

3.1.4a Is the project in a California Attainment Area? **YES.**

3.1.9 Examine local impacts. (Proceed to Section 4.)

Section 4 of the Protocol assesses local analysis. Assessment of the project's effect on localized ambient air quality is based on analysis of CO and PM_{10} emissions, with the focus on CO. Localized emissions of CO and PM_{10} may increase with implementation of the proposed project. CO is used as an indicator of a project's direct and indirect impact on local air quality, because CO does not readily disperse in the local environment in cool weather when the wind is fairly still. As stated in the Protocol, the determination of project-level CO impacts should be carried out according to the Local Analysis flow chart shown in Figure 2 of the Protocol. The following discussion provides explanatory remarks for every step of the local analysis in Figure 2 of the protocol.

Level 1: Is the project in a CO nonattainment area? **NO**. Was the area redesignated as "attainment" after the 1990 Clean Air Act? **NO**. (Proceed to Level 7.)

Level 7: Does the project worsen air quality? **YES.** Is the project suspected of resulting in higher CO concentrations than those existing within the region at the time at attainment demonstration? **YES.** Does the project involve a signalized intersection at LOS E or F? **NO**. Does project affect a signalized intersection worsening its LOS to E or F? **NO**. Are there other reasons to believe the project may have adverse air quality impacts? **YES.** Several new roadway intersections will be introduced into the area. (Proceed to Level 4.)

Level 4: Perform a screening analysis considering project location, nearby receptors, traffic volumes, LOS, and air quality conditions for current and future years.

Are impacts acceptable? The screening analysis in Appendix A of the CO Protocol is based on the EMFAC7 model. As the new EMFAC2002 model is required for CO hot spot analyses, the screening analysis Appendix A is no longer to be used. (Proceed to Level 5.)

Level 5: Perform a detailed analysis. Are impacts acceptable? **YES.** As detailed below, a CALINE4 CO hot spot analysis was conducted in the project area. No receptor locations will be exposed to CO concentrations exceeding the State or federal standards. Therefore, no further analysis is required.

CALINE4 Analysis

No significant increase in carbon monoxide (CO) emissions or concentrations is expected as a result of the project. CO hot spot analyses were conducted for the years 2003 and 2030. These existing year (2003) and build out year (2030) conditions show that the project area would not have CO hot spots, with or without the project. The proposed project would not have an adverse impact on local air quality for CO, and no mitigation measures would be required.

The primary mobile source pollutant of local concern is CO, a direct function of vehicle idling time and subsequent 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 concentration, modeling is recommended to determine a project's effect on local CO levels.

The highest CO concentrations would occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Modeling of the CO hot spot analysis was based on traffic volumes generated by the project traffic study (Fehr & Peers Associates, Inc., October 2003) that identified the peak traffic levels generated in the project area for the years 2003 and 2030.

The impact on local carbon monoxide 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 carbon monoxide, 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 conditions and is based upon 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 8 meters (approximately 26 feet) to 14 meters (approximately 46 feet) 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), a suburban topographical condition between the source and receptor, and a mixing height of 1,000 meters (3,281 feet), representing a worst-case scenario for CO concentrations.
- CO concentrations are calculated for the one-hour averaging period and then compared to the one-hour standards. CO eight-hour averages are extrapolated using techniques outlined in the SCAQMD CEQA Air Quality Handbook, April 1993, and compared to the eight-hour standards; a persistence factor of 0.7 was used to predict the eight-hour standard.
- The "at-grade" link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used 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 EMFAC2002 model for all vehicles based on the adjusted speed for the years 2003 and 2030 were used for the vehicle fleet.
- The one-hour and eight-hour background CO concentrations are listed on the EPA Web site (www.epa.gov/air/data/index.html). The "background" concentrations are then added to the model results for future with and without the proposed project conditions. The projected CO concentrations are 3.3 ppm for the one-hour CO and 1.9 ppm for the eight-hour CO.

The data in Tables E and F show the projected CO levels for the 2003 existing year and 2030 build out conditions respectively during the weekday p.m. peak hour. There is no exceedance of either the

Table E: Existing CO Concentrations, P.M. Peak Hour

Intersection	Receptor Distance to Road Centerline (Meters)	One-Hour CO Concentration (ppm)	Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr	8-Hr
SB 101 & Los Berros Rd.	10	4.2	2.5	No	No
	10	4.2	2.5	No	No
	8	4.1	2.5	No	No
	8	4.1	2.5	No	No
NB 101 & Los Berros Rd.	10	4.1	2.5	No	No
	10	4.0	2.4	No	No
	8	4.0	2.4	No	No
	8	4.0	2.4	No	No
Pomeroy Rd. & Willow Rd.	8	4.1	2.5	No	No
	8	4.1	2.5	No	No
	8	3.9	2.3	No	No
	8	3.9	2.3	No	No
Hetrick Ave. & Willow Rd.	8	3.5	2.0	No	No
	8	3.5	2.0	No	No
	8	3.5	2.0	No	No
	8	3.5	2.0	No	No
SB 101 Off/S. Frontage Rd. & Tefft St.	14	5.9	3.7	No	No
	14	5.6	3.5	No	No
	10	5.6	3.5	No	No
	10	5.6	3.5	No	No
SB 101 On & Tefft St.	10	5.5	3.4	No	No
	10	5.4	3.4	No	No
	10	5.3	3.3	No	No
	10	5.3	3.3	No	No
NB 101 & Tefft St.	14	5.0	3.1	No	No
	10	4.9	3.0	No	No
	10	4.9	3.0	No	No
	10	4.8	3.0	No	No

Source: LSA Associates, Inc. (2003).
NOTE: Includes ambient 1-hour concentration of 3.3 ppm and ambient 8-hour concentration of 1.9 ppm. Measured at the Santa Maria, 906 S Broadway, AQ Station (Santa Barbara County).

Table F: Build-Out (2030) CO Concentrations without/with Proposed Project, P.M. Peak Hour

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	One-Hour CO Concentration (ppm)	Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
SB 101 & Los Berros Rd.	10	-0.2/-0.2	3.8/3.6	2.3/2.1	No	No
	10	-0.2/-0.2	3.8/3.6	2.3/2.1	No	No
	8	-0.2/-0.2	3.8/3.6	2.3/2.1	No	No
	8	-0.2/-0.2	3.8/3.6	2.3/2.1	No	No
NB 101 & Los Berros Rd.	10	0.0/0.0	3.7/3.7	2.2/2.2	No	No
	10	-0.1/-0.1	3.7/3.6	2.2/2.1	No	No
	8	-0.1/-0.1	3.7/3.6	2.2/2.1	No	No
	8	-0.1/-0.1	3.7/3.6	2.2/2.1	No	No
Pomeroy Rd. & Willow Rd.	8	-0.1/-0.1	3.6/3.5	2.1/2.0	No	No
	8	-0.1/-0.1	3.6/3.5	2.1/2.0	No	No
	8	-0.1/-0.1	3.6/3.5	2.1/2.0	No	No
	8	0.0/0.0	3.5/3.5	2.0/2.0	No	No
Hetrick Ave. & Willow Rd.	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
N. Frontage Rd. & Willow Rd.	8	0.3/0.2	3.3/3.6	1.9/2.1	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
SB 101 & Willow Rd.	12	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	12	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	12	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	12	0.2/0.1	3.3/3.5	1.9/2.0	No	No
NB 101 & Willow Rd.	12	0.1/0.1	3.3/3.4	1.9/2.0	No	No
	12	0.1/0.1	3.3/3.4	1.9/2.0	No	No
	12	0.1/0.1	3.3/3.4	1.9/2.0	No	No
	12	0.1/0.1	3.3/3.4	1.9/2.0	No	No
Thompson Ave. & Willow Rd.	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
	8	0.2/0.1	3.3/3.5	1.9/2.0	No	No
SB 101 Off/S. Frontage Rd. & Tefft St.	14	-0.1/0.0	4.2/4.1	2.5/2.5	No	No
	14	-0.1/0.0	4.2/4.1	2.5/2.5	No	No
	10	-0.2/-0.1	4.2/4.0	2.5/2.4	No	No
	10	-0.2/-0.1	4.2/4.0	2.5/2.4	No	No
SB 101 On & Tefft St.	14	-0.2/-0.2	4.1/3.9	2.5/2.3	No	No
	14	-0.1/-0.1	4.0/3.9	2.4/2.3	No	No
	10	-0.1/-0.1	4.0/3.9	2.4/2.3	No	No
	10	-0.1/-0.1	4.0/3.9	2.4/2.3	No	No
NB 101 & Tefft St.	14	-0.2/-0.1	4.0/3.8	2.4/2.3	No	No
	10	-0.1/0.0	3.9/3.8	2.3/2.3	No	No
	10	-0.1/0.0	3.9/3.8	2.3/2.3	No	No
	10	-0.1/0.0	3.9/3.8	2.3/2.3	No	No

Source: LSA Associates, Inc. (2003).
NOTE: Includes ambient 1-hour concentration of 3.3 ppm and ambient 8-hour concentration of 1.9 ppm. Measured at the Santa Maria, 906 S Broadway, AQ Station (Santa Barbara County).

State or federal CO standards for the one-hour or the eight-hour durations. The one-hour CO concentration ranges from 3.5 to 5.9 ppm in year 2003 and from 3.3 to 4.2 ppm in year 2030. The eight-hour CO concentration ranges from 2.0 to 3.7 ppm in year 2003 and from 1.9 to 2.5 ppm in year 2030. They are all below federal and State standards. CALINE4 model printouts are included in Appendix A. As no CO levels would exceed the federal and State one-hour and eight-hour standards, no CO hot spots would occur.

SHORT-TERM CONSTRUCTION RELATED IMPACTS

Construction Equipment Exhaust Emissions

Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions during the construction envisioned on site will vary daily as construction activity levels change. The use of construction equipment on site will result in localized exhaust emissions. Caltrans Standard Specifications for construction (Sections 10 and 18 for dust control and Section 39–306 for asphalt concrete plant) will be adhered to in order to reduce emissions as a result of construction equipment.

Currently, no information is available regarding the construction operation and schedule for the proposed project. Therefore, the following construction emissions estimates, summarized in Table G, were based on projects similar to the proposed project.

The SLOCAPCD has established emissions thresholds for construction activities associated with a proposed project. As shown, when properly coordinated, construction equipment emissions would not exceed the daily thresholds for any of the criteria pollutants: NO_X, ROC, CO, SO_X and PM_{10}. Construction equipment exhausts shown in the table assumed a peak day operation.

Fugitive Dust

PM_{10} emissions from site clearance/grading operations during a peak construction day are based on assumptions and past experience on similar sized projects. The entire site is not expected to be under construction at one time. It is assumed that up to three acres of land would be under construction or exposed at any point in time. SLOCAPCD states that any project with a grading area greater than four acres of continuously worked area will exceed the 2.5 tons/quarter PM_{10} threshold. Additionally, the project is underlain by medium to fine grained, well sorted sand that is less subject to dust emissions than typical soils. Therefore, with the implementation of the Best Available Control Technology for construction equipment (CBACT), listed in Appendix B, the project's impact will be less than significant.

Table G: Daily Construction Equipment Exhaust Emissions

Number and Equipment Type[1]	No. of Hours in Operation	Pollutants (lbs./day)				
		CO	ROC	NO_X	SO_X	PM_{10}
2 Tracked Loader	8	3.2	1.6	13.2	1.2	1.0
2 Tracked Tractor	8	5.6	1.0	20.2	2.2	1.8
2 Scraper	8	20.2	4.6	61.4	7.4	6.4
1 Roller	8	2.4	0.5	6.9	0.5	0.4
2 Motor Graders	8	2.4	0.6	11.4	1.4	1.0
2 Miscellaneous	8	10.8	2.4	27.1	2.3	2.2
24 Construction Worker Trips	80.5 k (50 mi)/RT[2]	10.3	1.9	3.3	0.6	1.2
TOTAL		54.9	12.6	143.5	15.6	14.0
SLOCAPCD Threshold		N/A	185	185	N/A	75
Exceed SLOCAPCD Threshold?			NO	NO		NO

Source: LSA Associates, Inc. 2003.

[1] Emission factors provided in EPA, AP-42, Volume II.

[2] RT: Round-trip

Naturally Occurring Asbestos

The project is located in San Luis Obispo County, which is among the counties listed as containing serpentine and ultramafic rock; however, a general location guide[1] shows no areas of naturally occurring asbestos (NOA) in the project vicinity. Therefore, NOA impact during project construction would be minimal to none.

LONG-TERM AIR QUALITY EFFECTS

Mobile Sources

As discussed earlier, the project would not have any adverse impact on local air quality. In addition, there will be no new regional trips generated as a result of the project. The project would alleviate existing local congestion in the project area and would have beneficial regional effects on air quality.

Diesel Toxics Analysis

The following discussion of diesel toxics evaluates two issues: first, the general health risks of air toxics and the current contribution of diesel trucks to those risks; second, the project's potential air toxics impact.

Chemicals surround us all our lives. Some are beneficial, some are harmful. Some are necessary for good health in small amounts, but harmful in larger amounts. Determining how hazardous a substance is depends on many factors, including the amount, how it enters the body, how long the exposure is, and what organs in the body are affected. One major way these substances enter the body is through inhalation. The form can be either gas or particulate. While many gases are harmful, very small particles penetrate deep into the lungs, contributing to a range of health problems. Exhaust from diesel engines is a major source of these airborne particles. California's Office of Environmental Health Hazard Assessment (OEHHA) has determined that long-term exposure to diesel exhaust particulate poses the highest cancer risk of any toxic air contaminant it has evaluated. Fortunately, improvements to diesel fuel and diesel engines have already reduced emissions of some of the pollutants associated with diesel exhaust. California's Air Resources Board has developed a Diesel Risk Reduction Plan which, when fully implemented, will result in a 75 percent reduction in particle emissions from diesel equipment by 2010 (compared to 2000 levels) and an 85 percent reduction by 2020.

It is not expected that implementation of this project will cause a significant increase in toxic air constituents. In fact, since motor vehicles produce more exhaust per mile at slower speeds, and since this project will reduce traffic slow-downs, the effect of this project should be to reduce emissions per mile and therefore exposure of the population to toxic constituents from vehicle exhaust.

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1 A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos, Department of Conservation, Division of Mines and Geology, State of California, August, 2000. (ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf)

Air Quality Management Plan Consistency Analysis

A CAP describes air pollution control strategies to be taken by counties or regions classified as nonattainment areas. The CAP's main purpose is to bring the area into compliance with the requirements of federal and State air quality standards. The CAP uses the assumptions and projections by local planning agencies to determine control strategies for regional compliance status. Therefore, any projects causing a significant impact on air quality would impede the progress of the CAP. For a project in the SCCAB to be consistent with the CAP, the pollutants emitted from the project must not exceed the SLOCAPCD significance threshold or cause a significant impact on air quality. If feasible mitigation measures can be implemented to reduce the project's impact level from significant to less than significant under CEQA, the project is considered to be consistent with the CAP.

A consistency analysis determination plays an essential role in local agency project review by linking local planning and unique individual projects to the CAP in the following ways: 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 fully addressed, and it provides the local agency with ongoing information, assuring local decision makers that they are making real contributions to clean air goals defined in the most current CAP (adopted in 1991 and updated in 1995, 1998 and 2001). Because the CAP is based on projections from local General Plans, projects consistent with the local General Plan are considered consistent with the CAP.

Air quality models are used to demonstrate that the project's emissions will not contribute to the deterioration or impede the progress of air quality goals stated in the CAP. The air quality models use project-specific data to estimate the quantity of pollutants generated from the implementation of a project. The results for the No Project and the Proposed Project scenarios in the horizon year are compared to the CAP's air quality projections.

As shown above, the proposed project will not significantly contribute to or cause deterioration of existing air quality; therefore, mitigation measures are not required for the long-term operation of the project. Hence, the proposed project is considered to be consistent with the County of San Luis Obispo's General Plan and the SLOCOG forecast, and is therefore consistent with the CAP.

Conformity Analysis

Conformity determinations require the analysis of direct and indirect emissions associated with the proposed project and their comparison to the without project condition. If the total of direct and indirect emissions from the project reaches or exceeds the regionally significant thresholds, the Lead Agency must perform a conformity determination to demonstrate the positive conformity of the federal action.

As stated previously, the proposed project is expected to improve traffic flow and reduce delay and congestion. No significant hot spots for CO or PM_{10} would occur as a result of the proposed project.

The proposed project is listed in SLOCOG's Regional Transportation Improvement Program (RTIP) (Project ID #4745). Regional PM_{10} SIP budget compliance was accounted for during the current approved RTP and RTIP conformity determination. The proposed project is consistent with the scope of design concept of the RTIP. Therefore, the proposed project is in conformance with the SIP. The project will also comply with all SLOCAPCD requirements.

6.0 STANDARD CONDITIONS

The following standard conditions would reduce or minimize air pollutant emissions associated with project construction activities:

- The construction contractor shall adhere to the requirements of SLOCAPCD rules and regulations on cutback and emulsified asphalt paving materials.
- The construction contractor shall adhere to the requirements of SLOCAPCD Rule 403 to reduce fugitive dust emissions. The Best Available Control Technologies for construction equipment (CBACT) shall be adhered to during the project construction. All of the SLOCAPCD's construction mitigation measures have been included in Appendix B.

7.0 MINIMIZATION MEASURES

7.1 CONSTRUCTION IMPACTS

The following measures are recommended for implementation to reduce air pollutants generated by vehicle and equipment exhaust during the project construction phase:

- Develop a comprehensive construction activity management plan designed to minimize the amount of large construction equipment operating during any given time period.
- Schedule construction truck trips during non-peak hours to reduce peak hour emissions.
- Limit the length of the construction work-day period, if necessary.
- Phase construction activities, if appropriate.
- 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.
- The construction contractor shall utilize electric or alternative-fuel powered equipment in lieu of gasoline and diesel powered engines where feasible.
- The construction contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use.
- The construction contractor shall time the construction activities so as not to interfere with peak hour traffic and to minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.
- All construction equipment shall use ARB approved on-road diesel fuel, if locally available.

7.2 OPERATIONAL IMPACTS

No mitigation is required.

8.0 REFERENCES

California Air Resources Board Web site: http://www.arb.ca.gov (accessed October, 2003)

Caltrans 1988. Air Quality Technical Analysis Notes.

Caltrans 1997. Transportation Project-Level Carbon Monoxide Protocol.

Fehr & Peers Associates, Inc. October 2003. Draft Traffic Operations Report - US 101/Willow Road Interchange Project.

San Luis Obispo County Air Pollution Control District. CEQA Air Quality Handbook. 2003.

San Luis Obispo County Air Pollution Control District. Clean Air Plan. 2001.

Western Regional Climatic Center 2002.

APPENDIX A

SUPPORT DATA FOR CO HOT SPOT ANALYSIS

WILLOW ROAD INTERCHANGE

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

EXISTING BASELINE CONDITIONS

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

JOB:
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	2	-150	2	0	AG	0	6.7	.0	10.0
B. SB 101NBD	2	0	2	150	AG	0	6.7	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	6.7	.0	10.0
D. SB 101SBA	-4	150	-4	0	AG	90	6.7	.0	10.0
E. SB 101SBD	-4	0	-4	-150	AG	270	6.7	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	159	6.7	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	371	6.7	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	289	6.7	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	0	6.7	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	278	6.7	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	368	6.7	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	29	6.7	.0	10.0
M. SB 101NBAX	2	-750	2	-150	AG	0	6.7	.0	10.0
N. SB 101NBDX	2	150	2	750	AG	0	6.7	.0	10.0
O. SB 101SBAX	-4	750	-4	150	AG	249	6.7	.0	10.0
P. SB 101SBDX	-4	-150	-4	-750	AG	270	6.7	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	371	6.7	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	289	6.7	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	307	6.7	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	368	6.7	.0	10.0

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

JOB:
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-10	8	1.8
3. SW	-10	-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	-10	150	1.8
11. SW mdblk	-10	-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	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
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	276.	.9	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	264.	.8	.0	.0	.0	.0	.0	.0	.2	.0
3. SW	84.	.8	.0	.0	.0	.0	.1	.0	.0	.3
4. NE	264.	.9	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.8	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	84.	.8	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	264.	.7	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	354.	.3	.0	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	175.	.4	.0	.0	.0	.1	.0	.1	.0	.0
11. SW mdblk	5.	.4	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.3	.0	.0	.0	.0	.0	.1	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.8	.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	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.4	.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.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	.0	.0	.4	.0	.0	.0	.0	.0	.1	.0	.0	.1
3. SW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.3	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	.0	.2	.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	.0	.0	.2	.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	.3	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.4
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

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

JOB:
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	4	-150	4	0	AG	27	6.7	.0	10.0
B. NB 101NBD	4	0	4	150	AG	146	6.7	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	223	6.7	.0	10.0
D. NB 101SBA	-2	150	-2	0	AG	0	6.7	.0	10.0
E. NB 101SBD	-2	0	-2	-150	AG	0	6.7	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	6.7	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	219	6.7	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	246	6.7	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	70	6.7	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	160	6.7	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	307	6.7	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	0	6.7	.0	10.0
M. NB 101NBAX	4	-750	4	-150	AG	250	6.7	.0	10.0
N. NB 101NBDX	4	150	4	750	AG	146	6.7	.0	10.0
O. NB 101SBAX	-2	750	-2	150	AG	0	6.7	.0	10.0
P. NB 101SBDX	-2	-150	-2	-750	AG	0	6.7	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	289	6.7	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	246	6.7	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	160	6.7	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	307	6.7	.0	10.0

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

JOB:
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
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	276.	.8	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	264.	.7	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	276.	.7	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	264.	.7	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	275.	.6	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	84.	.7	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	265.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	.3	.0	.0	.2	.0	.0	.0	.0	.0
10. NW mdblk	176.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.1	.0	.0	.0	.0	.0
12. NE mdblk	185.	.3	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.5	.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.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.5	.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.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
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	.2	.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	.3	.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	.4	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.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	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.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:
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Pomeroy RNBA	2	-150	2	0	AG	67	6.7	.0	10.0
B. Pomeroy RNBD	2	0	2	150	AG	82	6.7	.0	10.0
C. Pomeroy RNBL	2	-150	0	0	AG	191	6.7	.0	10.0
D. Pomeroy RSBA	-2	150	-2	0	AG	99	6.7	.0	10.0
E. Pomeroy RSBD	-2	0	-2	-150	AG	282	6.7	.0	10.0
F. Pomeroy RSBL	-2	150	0	0	AG	0	6.7	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	202	6.7	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	6.7	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	15	6.7	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	6.7	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	210	6.7	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	6.7	.0	10.0
M. Pomeroy RNBA	2	-750	2	-150	AG	258	6.7	.0	10.0
N. Pomeroy RNBD	2	150	2	750	AG	82	6.7	.0	10.0
O. Pomeroy RSBA	-2	750	-2	150	AG	99	6.7	.0	10.0
P. Pomeroy RSBD	-2	-150	-2	-750	AG	282	6.7	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	217	6.7	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	6.7	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	6.7	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	210	6.7	.0	10.0

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

JOB:
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	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	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	-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	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:
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	275.	.8	.0	.0	.0	.0	.1	.0	.2	.0
2. NW	174.	.8	.0	.0	.2	.0	.3	.0	.0	.0
3. SW	174.	.6	.0	.0	.1	.0	.3	.0	.0	.0
4. NE	265.	.6	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	271.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	.5	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	82.	.5	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	268.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.0	.0	.2	.0	.2	.0	.0	.0
10. NW mdblk	177.	.4	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	174.	.6	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	184.	.4	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	268.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.0	.0	.2	.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	.2	.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	.2	.0	.0	.4	.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	.3	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
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	.2	.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	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0

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

JOB:
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Hetrick ANBA	2	-150	2	0	AG	48	6.2	.0	10.0
B. Hetrick ANBD	2	0	2	150	AG	48	6.2	.0	10.0
C. Hetrick ANBL	2	-150	0	0	AG	0	6.2	.0	10.0
D. Hetrick ASBA	-2	150	-2	0	AG	78	6.2	.0	10.0
E. Hetrick ASBD	-2	0	-2	-150	AG	78	6.2	.0	10.0
F. Hetrick ASBL	-2	150	0	0	AG	1	6.2	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	6.2	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	1	6.2	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	6.2	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	6.2	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	6.2	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	6.2	.0	10.0
M. Hetrick ANBA	2	-750	2	-150	AG	48	6.2	.0	10.0
N. Hetrick ANBD	2	150	2	750	AG	48	6.2	.0	10.0
O. Hetrick ASBA	-2	750	-2	150	AG	79	6.2	.0	10.0
P. Hetrick ASBD	-2	-150	-2	-750	AG	78	6.2	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	6.2	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	1	6.2	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	6.2	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	6.2	.0	10.0

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

JOB:
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	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	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	-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	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:
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	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	339.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	159.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	21.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	201.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	309.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	51.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	51.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	231.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.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.	.2	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.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	.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	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. N FrontagNBA	0	-150	0	0	AG	0	.0	.0	10.0
B. N FrontagNBD	0	0	0	150	AG	0	.0	.0	10.0
C. N FrontagNBL	2	-150	0	0	AG	0	.0	.0	10.0
D. N FrontagSBA	0	150	0	0	AG	0	.0	.0	10.0
E. N FrontagSBD	0	0	0	-150	AG	0	.0	.0	10.0
F. N FrontagSBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. N FrontagNBA	0	-750	0	-150	AG	0	.0	.0	10.0
N. N FrontagNBD	0	150	0	750	AG	0	.0	.0	10.0
O. N FrontagSBA	0	750	0	150	AG	0	.0	.0	10.0
P. N FrontagSBD	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.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:
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	0	-150	0	0	AG	0	.0	.0	10.0
B. SB 101NBD	0	0	0	150	AG	0	.0	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	.0	.0	10.0
D. SB 101SBA	0	150	0	0	AG	0	.0	.0	10.0
E. SB 101SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. SB 101NBAX	0	-750	0	-150	AG	0	.0	.0	10.0
N. SB 101NBDX	0	150	0	750	AG	0	.0	.0	10.0
O. SB 101SBAX	0	750	0	150	AG	0	.0	.0	10.0
P. SB 101SBDX	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.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:
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	0	-150	0	0	AG	0	.0	.0	10.0
B. NB 101NBD	0	0	0	150	AG	0	.0	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	0	.0	.0	10.0
D. NB 101SBA	0	150	0	0	AG	0	.0	.0	10.0
E. NB 101SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. NB 101NBAX	0	-750	0	-150	AG	0	.0	.0	10.0
N. NB 101NBDX	0	150	0	750	AG	0	.0	.0	10.0
O. NB 101SBAX	0	750	0	150	AG	0	.0	.0	10.0
P. NB 101SBDX	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.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:
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Thompson NBA	0	-120	0	0	AG	0	.0	.0	10.0
B. Thompson NBD	0	0	0	150	AG	0	.0	.0	10.0
C. Thompson NBL	2	-120	0	0	AG	0	.0	.0	10.0
D. Thompson SBA	0	120	0	0	AG	0	.0	.0	10.0
E. Thompson SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. Thompson SBL	-2	120	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-120	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-120	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	120	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	120	2	0	0	AG	0	.0	.0	10.0
M. Thompson NBA	0	-750	0	-150	AG	0	.0	.0	10.0
N. Thompson NBD	0	150	0	750	AG	0	.0	.0	10.0
O. Thompson SBA	0	750	0	150	AG	0	.0	.0	10.0
P. Thompson SBD	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.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:
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OfNBA	2	-150	2	0	AG	249	8.4	.0	10.0
B. SB 101 OfNBD	2	0	2	150	AG	0	8.4	.0	10.0
C. SB 101 OfNBL	2	-150	0	0	AG	62	8.4	.0	10.0
D. SB 101 OfSBA	-4	150	-4	0	AG	539	8.4	.0	10.0
E. SB 101 OfSBD	-4	0	-4	-150	AG	466	8.4	.0	10.0
F. SB 101 OfSBL	-2	150	0	0	AG	112	8.4	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	897	8.4	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	1152	8.4	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	8.4	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	681	8.4	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	1114	8.4	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	192	8.4	.0	10.0
M. SB 101 OfNBA	2	-750	2	-150	AG	311	8.4	.0	10.0
N. SB 101 OfNBD	2	150	2	750	AG	0	8.4	.0	10.0
O. SB 101 OfSBA	-4	750	-4	150	AG	651	8.4	.0	10.0
P. SB 101 OfSBD	-4	-150	-4	-750	AG	466	8.4	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	897	8.4	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	1152	8.4	.0	10.0
S, Tefft StWBAX	750	7	150	7	AG	873	8.4	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	1114	8.4	.0	10.0

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

JOB:
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-10	14	1.8
3. SW	-10	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
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	277.	2.3	.1	.0	.0	.0	.2	.0	1.0	.0
2. NW	97.	2.3	.0	.0	.0	.3	.0	.0	.0	.4
3. SW	83.	2.6	.1	.0	.0	.0	.3	.0	.0	1.2
4. NE	263.	2.3	.0	.0	.0	.2	.0	.0	.3	.0
5. ES mdblk	277.	2.3	.0	.0	.0	.0	.0	.0	.1	1.3
6. WN mdblk	97.	2.3	.0	.0	.0	.0	.0	.0	.3	.2
7. WS mdblk	83.	2.1	.0	.0	.0	.0	.0	.0	1.0	.1
8. EN mdblk	263.	2.0	.0	.0	.0	.0	.0	.0	.2	.4
9. SE mdblk	353.	1.2	.3	.0	.0	.0	.3	.0	.0	.0
10. NW mdblk	174.	1.3	.0	.0	.0	.6	.0	.1	.0	.0
11. SW mdblk	7.	1.2	.2	.0	.0	.0	.6	.0	.0	.0
12. NE mdblk	186.	1.0	.0	.0	.0	.3	.0	.1	.0	.0
13. ES blk	277.	2.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	2.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.2	.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:
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	.4	.0	.0	.0	.0	.0	.2	.0	.0	.3
2. NW	*	.0	.7	.1	.1	.0	.0	.0	.0	.0	.3	.2	.0
3. SW	*	.0	.3	.0	.2	.0	.0	.0	.0	.0	.2	.3	.0
4. NE	*	.0	.0	1.2	.0	.0	.0	.0	.0	.3	.0	.0	.2
5. ES mdblk	*	.0	.3	.2	.1	.0	.0	.0	.0	.1	.0	.0	.2
6. WN mdblk	*	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.2	.0	.0
7. WS mdblk	*	.0	.1	.4	.0	.0	.0	.0	.0	.0	.1	.1	.0
8. EN mdblk	*	.0	.8	.1	.2	.0	.0	.0	.0	.1	.0	.0	.1
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	1.5	.5	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.0	.0	.7
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	1.2	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.4	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.3	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0

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

JOB:
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OnNBA	2	-150	2	0	AG	0	8.4	.0	10.0
B. SB 101 OnNBD	2	0	2	150	AG	0	8.4	.0	10.0
C. SB 101 OnNBL	2	-150	0	0	AG	0	8.4	.0	10.0
D. SB 101 OnSBA	0	150	0	0	AG	0	8.4	.0	10.0
E. SB 101 OnSBD	0	0	0	-150	AG	452	8.4	.0	10.0
F. SB 101 OnSBL	-2	150	0	0	AG	0	8.4	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	1043	8.4	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	679	8.4	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	8.4	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	873	8.4	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	873	8.4	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	88	8.4	.0	10.0
M. SB 101 OnNBA	2	-750	2	-150	AG	0	8.4	.0	10.0
N. SB 101 OnNBD	2	150	2	750	AG	0	8.4	.0	10.0
O. SB 101 OnSBA	0	750	0	150	AG	0	8.4	.0	10.0
P. SB 101 OnSBD	0	-150	0	-750	AG	452	8.4	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	1043	8.4	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	679	8.4	.0	10.0
S. Tefft StWBAX	750	7	150	7	AG	961	8.4	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	873	8.4	.0	10.0

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

JOB:
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
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.	2.2	.0	.0	.0	.0	.2	.0	1.1	.0
2. NW	263.	1.9	.0	.0	.0	.0	.0	.0	.3	.0
3. SW	277.	2.0	.0	.0	.0	.0	.0	.0	1.2	.0
4. NE	263.	1.9	.0	.0	.0	.0	.0	.0	.4	.0
5. ES mdblk	276.	1.7	.0	.0	.0	.0	.0	.0	.2	.8
6. WN mdblk	97.	1.9	.0	.0	.0	.0	.0	.0	.4	.1
7. WS mdblk	83.	2.0	.0	.0	.0	.0	.0	.0	1.2	.0
8. EN mdblk	263.	2.0	.0	.0	.0	.0	.0	.0	.2	.3
9. SE mdblk	349.	.7	.0	.0	.0	.0	.5	.0	.1	.0
10. NW mdblk	179.	.4	.0	.0	.0	.0	.1	.0	.0	.0
11. SW mdblk	9.	.8	.0	.0	.0	.0	.6	.0	.0	.0
12. NE mdblk	182.	.4	.0	.0	.0	.0	.1	.0	.0	.0
13. ES blk	276.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.2	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
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	.3	.0	.0	.0	.0	.0	.2	.0	.0	.3
2. NW	.0	.0	1.0	.0	.0	.0	.0	.0	.3	.0	.0	.2
3. SW	.0	.0	.3	.0	.0	.0	.0	.0	.2	.0	.0	.3
4. NE	.0	.0	.9	.0	.0	.0	.0	.0	.3	.0	.0	.2
5. ES mdblk	.0	.3	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
6. WN mdblk	.0	.1	1.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
7. WS mdblk	.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	.0	1.0	.1	.0	.0	.0	.0	.0	.1	.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	.1	.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	.1	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.6	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.5
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	1.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.5	.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	.6	.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:
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	*	4	-150	4	0	*	AG	152	6.7	.0	10.0
B. NB 101NBD	*	4	0	4	150	*	AG	349	6.7	.0	10.0
C. NB 101NBL	*	2	-150	0	0	*	AG	441	6.7	.0	10.0
D. NB 101SBA	*	0	150	0	0	*	AG	0	6.7	.0	10.0
E. NB 101SBD	*	0	0	0	-150	*	AG	0	6.7	.0	10.0
F. NB 101SBL	*	-2	150	0	0	*	AG	0	6.7	.0	10.0
G. Tefft StEBA	*	-150	-7	0	-7	*	AG	502	6.7	.0	10.0
H. Tefft StEBD	*	0	-7	150	-7	*	AG	654	6.7	.0	10.0
I. Tefft StEBL	*	-150	-5	0	0	*	AG	289	6.7	.0	10.0
J. Tefft StWBA	*	150	4	0	4	*	AG	580	6.7	.0	10.0
K. Tefft StWBD	*	0	4	-150	4	*	AG	961	6.7	.0	10.0
L. Tefft StWBL	*	150	2	0	0	*	AG	0	6.7	.0	10.0
M. NB 101NBAX	*	4	-750	4	-150	*	AG	593	6.7	.0	10.0
N. NB 101NBDX	*	4	150	4	750	*	AG	349	6.7	.0	10.0
O. NB 101SBAX	*	0	750	0	150	*	AG	0	6.7	.0	10.0
P. NB 101SBDX	*	0	-150	0	-750	*	AG	0	6.7	.0	10.0
Q. Tefft StEBAX	*	-750	-7	-150	-7	*	AG	791	6.7	.0	10.0
R. Tefft StEBDX	*	150	-7	750	-7	*	AG	654	6.7	.0	10.0
S. Tefft StWBAX	*	750	4	150	4	*	AG	580	6.7	.0	10.0
T. Tefft StWBDX	*	-150	4	-750	4	*	AG	961	6.7	.0	10.0

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

JOB:
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-14	1.8
2. NW	-7	10	1.8
3. SW	-7	-14	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
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	277.	1.5	.0	.0	.2	.0	.0	.0	.4	.0
2. NW	263.	1.6	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	83.	1.3	.0	.0	.2	.0	.0	.0	.0	.6
4. NE	263.	1.7	.0	.2	.0	.0	.0	.0	.2	.0
5. ES mdblk	276.	1.3	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	82.	1.3	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	264.	1.2	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	352.	.7	.2	.0	.3	.0	.0	.0	.0	.0
10. NW mdblk	176.	.5	.0	.2	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.7	.1	.0	.3	.0	.0	.0	.0	.0
12. NE mdblk	185.	.7	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.6	.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:
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	.2	.0	.3	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.2	.0	.9	.0	.0	.0	.0	.0	.2	.0	.0	.2
3. SW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
4. NE	.2	.0	.8	.0	.0	.0	.0	.0	.2	.0	.0	.2
5. ES mdblk	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.1	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.1	.0	.0	.0	.0	.0	.1	.0	.0	.1
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	.3	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	1.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.5
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.6	.0
17. SE blk	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0

WILLOW ROAD INTERCHANGE

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

BUILD-OUT YEAR (2030) WITHOUT PROJECT

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

JOB:
RUN: 2030nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	2	-150	2	0	AG	0	2.1	.0	10.0
B. SB 101NBD	2	0	2	150	AG	0	2.1	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	2.1	.0	10.0
D. SB 101SBA	-4	150	-4	0	AG	185	2.1	.0	10.0
E. SB 101SBD	-4	0	-4	-150	AG	505	2.1	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	120	2.1	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	820	2.1	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	495	2.1	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	0	2.1	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	650	2.1	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	835	2.1	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	60	2.1	.0	10.0
M. SB 101NBAX	2	-750	2	-150	AG	0	2.1	.0	10.0
N. SB 101NBDX	2	150	2	750	AG	0	2.1	.0	10.0
O. SB 101SBAX	-4	750	-4	150	AG	305	2.1	.0	10.0
P. SB 101SBDX	-4	-150	-4	-750	AG	505	2.1	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	820	2.1	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	495	2.1	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	710	2.1	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	835	2.1	.0	10.0

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

JOB:
RUN: 2030nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-10	8	1.8
3. SW	-10	-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	-10	150	1.8
11. SW mdblk	-10	-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	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030nP-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	276.	.5	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	264.	.5	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	276.	.5	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	264.	.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	97.	.5	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.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	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	186.	.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	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	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.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.	.1	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.1	.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	.1	.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	.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	.3	.0	.0	.2
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	.1	.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	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	4	-150	4	0	AG	40	2.1	.0	10.0
B. NB 101NBD	4	0	4	150	AG	195	2.1	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	525	2.1	.0	10.0
D. NB 101SBA	-2	150	-2	0	AG	0	2.1	.0	10.0
E. NB 101SBD	-2	0	-2	-150	AG	0	2.1	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	2.1	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	395	2.1	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	435	2.1	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	100	2.1	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	280	2.1	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	710	2.1	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	0	2.1	.0	10.0
M. NB 101NBAX	4	-750	4	-150	AG	565	2.1	.0	10.0
N. NB 101NBDX	4	150	4	750	AG	195	2.1	.0	10.0
O. NB 101SBAX	-2	750	-2	150	AG	0	2.1	.0	10.0
P. NB 101SBDX	-2	-150	-2	-750	AG	0	2.1	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	495	2.1	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	435	2.1	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	280	2.1	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	710	2.1	.0	10.0

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

JOB:
RUN: 2030nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
RUN: 2030nP-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	276.	.4	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	276.	.4	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	350.	.2	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.2	.0	.0	.1	.0	.0	.0	.0	.0
12. NE mdblk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.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	354.	.2	.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.	.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:
RUN: 2030nP-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	.1	.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	.1	.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	.1	.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	.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	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.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	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.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:
RUN: 2030nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Pomeroy RNBA	2	-150	2	0	AG	100	1.5	.0	10.0
B. Pomeroy RNBD	2	0	2	150	AG	180	1.5	.0	10.0
C. Pomeroy RNBL	2	-150	0	0	AG	260	1.5	.0	10.0
D. Pomeroy RSBA	-2	150	-2	0	AG	200	1.5	.0	10.0
E. Pomeroy RSBD	-2	0	-2	-150	AG	455	1.5	.0	10.0
F. Pomeroy RSBL	-2	150	0	0	AG	0	1.5	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	345	1.5	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	1.5	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	80	1.5	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	1.5	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	350	1.5	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	1.5	.0	10.0
M. Pomeroy RNBA	2	-750	2	-150	AG	360	1.5	.0	10.0
N. Pomeroy RNBD	2	150	2	750	AG	180	1.5	.0	10.0
O. Pomeroy RSBA	-2	750	-2	150	AG	200	1.5	.0	10.0
P. Pomeroy RSBD	-2	-150	-2	-750	AG	455	1.5	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	425	1.5	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	1.5	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	1.5	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	350	1.5	.0	10.0

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

JOB:
RUN: 2030nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	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	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	-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	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:
RUN: 2030nP-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	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	271.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.2	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	270.	.0	.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	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.1	.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.	.1	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.1	.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	.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:
RUN: 2030nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Hetrick ANBA	2	-150	2	0	AG	75	1.4	.0	10.0
B. Hetrick ANBD	2	0	2	150	AG	75	1.4	.0	10.0
C. Hetrick ANBL	2	-150	0	0	AG	0	1.4	.0	10.0
D. Hetrick ASBA	-2	150	-2	0	AG	120	1.4	.0	10.0
E. Hetrick ASBD	-2	0	-2	-150	AG	120	1.4	.0	10.0
F. Hetrick ASBL	-2	150	0	0	AG	1	1.4	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	1.4	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	1	1.4	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	1.4	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	1.4	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	1.4	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	1.4	.0	10.0
M. Hetrick ANBA	2	-750	2	-150	AG	75	1.4	.0	10.0
N. Hetrick ANBD	2	150	2	750	AG	75	1.4	.0	10.0
O. Hetrick ASBA	-2	750	-2	150	AG	121	1.4	.0	10.0
P. Hetrick ASBD	-2	-150	-2	-750	AG	120	1.4	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	1.4	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	1	1.4	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	1.4	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	1.4	.0	10.0

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

JOB:
RUN: 2030nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	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	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	-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	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:
RUN: 2030nP-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	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	339.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	159.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	21.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	201.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.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	309.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	51.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	51.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	231.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.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	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:
RUN: 2030nP-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	.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:
RUN: 2030nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. N FrontagNBA	0	-150	0	0	AG	0	.0	.0	10.0
B. N FrontagNBD	0	0	0	150	AG	0	.0	.0	10.0
C. N FrontagNBL	2	-150	0	0	AG	0	.0	.0	10.0
D. N FrontagSBA	0	150	0	0	AG	0	.0	.0	10.0
E. N FrontagSBD	0	0	0	-150	AG	0	.0	.0	10.0
F. N FrontagSBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. N FrontagNBA	0	-750	0	-150	AG	0	.0	.0	10.0
N. N FrontagNBD	0	150	0	750	AG	0	.0	.0	10.0
O. N FrontagSBA	0	750	0	150	AG	0	.0	.0	10.0
P. N FrontagSBD	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB:
RUN: 2030nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
RUN: 2030nP-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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.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:
RUN: 2030nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	0	-150	0	0	AG	0	.0	.0	10.0
B. SB 101NBD	0	0	0	150	AG	0	.0	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	.0	.0	10.0
D. SB 101SBA	0	150	0	0	AG	0	.0	.0	10.0
E. SB 101SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. SB 101NBAX	0	-750	0	-150	AG	0	.0	.0	10.0
N. SB 101NBDX	0	150	0	750	AG	0	.0	.0	10.0
O. SB 101SBAX	0	750	0	150	AG	0	.0	.0	10.0
P. SB 101SBDX	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: 2030nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
RUN: 2030nP-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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.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:
RUN: 2030nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	0	-150	0	0	AG	0	.0	.0	10.0
B. NB 101NBD	0	0	0	150	AG	0	.0	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	0	.0	.0	10.0
D. NB 101SBA	0	150	0	0	AG	0	.0	.0	10.0
E. NB 101SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-150	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	150	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	0	.0	.0	10.0
M. NB 101NBAX	0	-750	0	-150	AG	0	.0	.0	10.0
N. NB 101NBDX	0	150	0	750	AG	0	.0	.0	10.0
O. NB 101SBAX	0	750	0	150	AG	0	.0	.0	10.0
P. NB 101SBDX	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: 2030nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
RUN: 2030nP-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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.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:
RUN: 2030nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Thompson NBA	0	-120	0	0	AG	0	.0	.0	10.0
B. Thompson NBD	0	0	0	150	AG	0	.0	.0	10.0
C. Thompson NBL	2	-120	0	0	AG	0	.0	.0	10.0
D. Thompson SBA	0	120	0	0	AG	0	.0	.0	10.0
E. Thompson SBD	0	0	0	-150	AG	0	.0	.0	10.0
F. Thompson SBL	-2	120	0	0	AG	0	.0	.0	10.0
G. Willow RdEBA	-120	0	0	0	AG	0	.0	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	.0	.0	10.0
I. Willow RdEBL	-120	-2	0	0	AG	0	.0	.0	10.0
J. Willow RdWBA	120	0	0	0	AG	0	.0	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	0	.0	.0	10.0
L. Willow RdWBL	120	2	0	0	AG	0	.0	.0	10.0
M. Thompson NBA	0	-750	0	-150	AG	0	.0	.0	10.0
N. Thompson NBD	0	150	0	750	AG	0	.0	.0	10.0
O. Thompson SBA	0	750	0	150	AG	0	.0	.0	10.0
P. Thompson SBD	0	-150	0	-750	AG	0	.0	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	0	.0	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	.0	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	.0	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	0	.0	.0	10.0

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

JOB:
RUN: 2030nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-7	1.8
2. NW	-7	7	1.8
3. SW	-7	-7	1.8
4. NE	7	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	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	-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	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:
RUN: 2030nP-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	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	0.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.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:
RUN: 2030nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OfNBA	2	-150	2	0	AG	325	2.1	.0	10.0
B. SB 101 OfNBD	2	0	2	150	AG	0	2.1	.0	10.0
C. SB 101 OfNBL	2	-150	0	0	AG	220	2.1	.0	10.0
D. SB 101 OfSBA	-4	150	-4	0	AG	830	2.1	.0	10.0
E. SB 101 OfSBD	-4	0	-4	-150	AG	745	2.1	.0	10.0
F. SB 101 OfSBL	-2	150	0	0	AG	160	2.1	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	1485	2.1	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	1745	2.1	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	2.1	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	1025	2.1	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	1835	2.1	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	280	2.1	.0	10.0
M. SB 101 OfNBA	2	-750	2	-150	AG	545	2.1	.0	10.0
N. SB 101 OfNBD	2	150	2	750	AG	0	2.1	.0	10.0
O. SB 101 OfSBA	-4	750	-4	150	AG	990	2.1	.0	10.0
P. SB 101 OfSBD	-4	-150	-4	-750	AG	745	2.1	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	1485	2.1	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	1745	2.1	.0	10.0
S. Tefft StWBAX	750	7	150	7	AG	1305	2.1	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	1835	2.1	.0	10.0

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

JOB:
RUN: 2030nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-10	14	1.8
3. SW	-10	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030nP-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	277.	.9	.0	.0	.0	.0	.0	.0	.4	.0
2. NW	98.	.8	.0	.0	.0	.1	.0	.0	.0	.2
3. SW	83.	.9	.0	.0	.0	.0	.1	.0	.0	.4
4. NE	263.	.9	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.8	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	353.	.4	.1	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	174.	.5	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	7.	.5	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	186.	.3	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.8	.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.	.4	.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.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1
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	.0	.4	.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	.5	.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	.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	.2	.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	.5	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OnNBA	2	-150	2	0	AG	0	2.1	.0	10.0
B. SB 101 OnNBD	2	0	2	150	AG	0	2.1	.0	10.0
C. SB 101 OnNBL	2	-150	0	0	AG	0	2.1	.0	10.0
D. SB 101 OnSBA	0	150	0	0	AG	0	2.1	.0	10.0
E. SB 101 OnSBD	0	0	0	-150	AG	750	2.1	.0	10.0
F. SB 101 OnSBL	-2	150	0	0	AG	0	2.1	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	1585	2.1	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	1015	2.1	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	2.1	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	1305	2.1	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	1305	2.1	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	180	2.1	.0	10.0
M. SB 101 OnNBA	2	-750	2	-150	AG	0	2.1	.0	10.0
N. SB 101 OnNBD	2	150	2	750	AG	0	2.1	.0	10.0
O. SB 101 OnSBA	0	750	0	150	AG	0	2.1	.0	10.0
P. SB 101 OnSBD	0	-150	0	-750	AG	750	2.1	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	1585	2.1	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	1015	2.1	.0	10.0
S. Tefft StWBAX	750	7	150	7	AG	1485	2.1	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	1305	2.1	.0	10.0

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

JOB:
RUN: 2030nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030nP-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.	.8	.0	.0	.0	.0	.0	.0	.4	.0
2. NW	263.	.7	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	83.	.7	.0	.0	.0	.0	.1	.0	.0	.3
4. NE	263.	.6	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	98.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	349.	.3	.0	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	179.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.3	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	182.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.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	353.	.3	.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.	.3	.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:
RUN: 2030nP-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	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.4	.0	.0	.0	.0	.0	.1	.0	.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	.1	.0	.0	.0
5. ES mdblk	*	.0	.1	.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	*	.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	.3	.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	.5	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.2	.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	.3	.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:
RUN: 2030nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	4	-150	4	0	AG	200	1.9	.0	10.0
B. NB 101NBD	4	0	4	150	AG	710	1.9	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	640	1.9	.0	10.0
D. NB 101SBA	0	150	0	0	AG	0	1.9	.0	10.0
E. NB 101SBD	0	0	0	-150	AG	0	1.9	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	1.9	.0	10.0
G. Tefft StEBA	-150	-7	0	-7	AG	650	1.9	.0	10.0
H. Tefft StEBD	0	-7	150	-7	AG	850	1.9	.0	10.0
I. Tefft StEBL	-150	-5	0	0	AG	525	1.9	.0	10.0
J. Tefft StWBA	150	4	0	4	AG	910	1.9	.0	10.0
K. Tefft StWBD	0	4	-150	4	AG	1365	1.9	.0	10.0
L. Tefft StWBL	150	2	0	0	AG	0	1.9	.0	10.0
M. NB 101NBAX	4	-750	4	-150	AG	840	1.9	.0	10.0
N. NB 101NBDX	4	150	4	750	AG	710	1.9	.0	10.0
O. NB 101SBAX	0	750	0	150	AG	0	1.9	.0	10.0
P. NB 101SBDX	0	-150	0	-750	AG	0	1.9	.0	10.0
Q. Tefft StEBAX	-750	-7	-150	-7	AG	1175	1.9	.0	10.0
R. Tefft StEBDX	150	-7	750	-7	AG	850	1.9	.0	10.0
S. Tefft StWBAX	750	4	150	4	AG	910	1.9	.0	10.0
T. Tefft StWBDX	-150	4	-750	4	AG	1365	1.9	.0	10.0

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

JOB:
RUN: 2030nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-14	1.8
2. NW	-7	10	1.8
3. SW	-7	-14	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
RUN: 2030nP-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	277.	.6	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	83.	.5	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.6	.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.	.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	175.	.2	.0	.1	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.1	.0	.0	.0	.0	.0
12. NE mdblk	186.	.3	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.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.	.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	354.	.3	.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.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030nP-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	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.3	.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	.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	.1	.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	.3	.1	.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	.3	.0	.0	.2
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	.1	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

WILLOW ROAD INTERCHANGE

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

BUILD-OUT YEAR (2030) WITH PROJECT

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

JOB:
RUN: 2030wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	2	-150	2	0	AG	0	1.7	.0	10.0
B. SB 101NBD	2	0	2	150	AG	0	1.7	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	1.7	.0	10.0
D. SB 101SBA	-4	150	-4	0	AG	90	1.7	.0	10.0
E. SB 101SBD	-4	0	-4	-150	AG	405	1.7	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	110	1.7	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	610	1.7	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	355	1.7	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	0	1.7	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	560	1.7	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	650	1.7	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	40	1.7	.0	10.0
M. SB 101NBAX	2	-750	2	-150	AG	0	1.7	.0	10.0
N. SB 101NBDX	2	150	2	750	AG	0	1.7	.0	10.0
O. SB 101SBAX	-4	750	-4	150	AG	200	1.7	.0	10.0
P. SB 101SBDX	-4	-150	-4	-750	AG	405	1.7	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	610	1.7	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	355	1.7	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	600	1.7	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	650	1.7	.0	10.0

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

JOB:
RUN: 2030wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-10	8	1.8
3. SW	-10	-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	-10	150	1.8
11. SW mdblk	-10	-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	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030wP-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	276.	.3	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	276.	.3	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	264.	.3	.0	.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	84.	.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	351.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.1	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	186.	.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	354.	.1	.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.	.1	.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:
RUN: 2030wP-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	.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	.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	.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	.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:
RUN: 2030wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	4	-150	4	0	AG	25	2.1	.0	10.0
B. NB 101NBD	4	0	4	150	AG	110	2.1	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	465	2.1	.0	10.0
D. NB 101SBA	-2	150	-2	0	AG	0	2.1	.0	10.0
E. NB 101SBD	-2	0	-2	-150	AG	0	2.1	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	2.1	.0	10.0
G. Los BerroEBA	-150	-2	0	-2	AG	325	2.1	.0	10.0
H. Los BerroEBD	0	-2	150	-2	AG	350	2.1	.0	10.0
I. Los BerroEBL	-150	-2	0	0	AG	30	2.1	.0	10.0
J. Los BerroWBA	150	2	0	2	AG	215	2.1	.0	10.0
K. Los BerroWBD	0	2	-150	2	AG	600	2.1	.0	10.0
L. Los BerroWBL	150	2	0	0	AG	0	2.1	.0	10.0
M. NB 101NBAX	4	-750	4	-150	AG	490	2.1	.0	10.0
N. NB 101NBDX	4	150	4	750	AG	110	2.1	.0	10.0
O. NB 101SBAX	-2	750	-2	150	AG	0	2.1	.0	10.0
P. NB 101SBDX	-2	-150	-2	-750	AG	0	2.1	.0	10.0
Q. Los BerroEBA	-750	-2	-150	-2	AG	355	2.1	.0	10.0
R. Los BerroEBD	150	-2	750	-2	AG	350	2.1	.0	10.0
S. Los BerroWBA	750	2	150	2	AG	215	2.1	.0	10.0
T. Los BerroWBD	-150	2	-750	2	AG	600	2.1	.0	10.0

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

JOB:
RUN: 2030wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
RUN: 2030wP-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	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.1
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	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	350.	.2	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	177.	.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	183.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.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.	.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	177.	.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	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-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	.1	.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	.1	.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	.1	.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	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
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	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.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:
RUN: 2030wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Pomeroy RNBA	2	-150	2	0	AG	50	1.7	.0	10.0
B. Pomeroy RNBD	2	0	2	150	AG	55	1.7	.0	10.0
C. Pomeroy RNBL	2	-150	0	0	AG	90	1.7	.0	10.0
D. Pomeroy RSBA	-2	150	-2	0	AG	50	1.7	.0	10.0
E. Pomeroy RSBD	-2	0	-2	-150	AG	175	1.7	.0	10.0
F. Pomeroy RSBL	-2	150	0	0	AG	10	1.7	.0	10.0
G. Willow RdEBA	-150	-2	0	-2	AG	440	1.7	.0	10.0
H. Willow RdEBD	0	-2	150	-2	AG	365	1.7	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	10	1.7	.0	10.0
J. Willow RdWBA	150	2	0	2	AG	260	1.7	.0	10.0
K. Willow RdWBD	0	2	-150	2	AG	350	1.7	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	35	1.7	.0	10.0
M. Pomeroy RNBA	2	-750	2	-150	AG	140	1.7	.0	10.0
N. Pomeroy RNBD	2	150	2	750	AG	55	1.7	.0	10.0
O. Pomeroy RSBA	-2	750	-2	150	AG	60	1.7	.0	10.0
P. Pomeroy RSBD	-2	-150	-2	-750	AG	175	1.7	.0	10.0
Q. Willow RdEBA	-750	-2	-150	-2	AG	450	1.7	.0	10.0
R. Willow RdEBD	150	-2	750	-2	AG	365	1.7	.0	10.0
S. Willow RdWBA	750	2	150	2	AG	295	1.7	.0	10.0
T. Willow RdWBD	-150	2	-750	2	AG	350	1.7	.0	10.0

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

JOB:
RUN: 2030wP-03 (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:
RUN: 2030wP-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	276.	.2	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.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	.1	.0
8. EN mdblk	264.	.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.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	183.	.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	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.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.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.	.1	.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:
RUN: 2030wP-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	.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	.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:
RUN: 2030wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Hetrick ANBA	2	-150	2	0	AG	145	1.5	.0	10.0
B. Hetrick ANBD	2	0	2	150	AG	140	1.5	.0	10.0
C. Hetrick ANBL	2	-150	0	0	AG	25	1.5	.0	10.0
D. Hetrick ASBA	-2	150	-2	0	AG	130	1.5	.0	10.0
E. Hetrick ASBD	-2	0	-2	-150	AG	210	1.5	.0	10.0
F. Hetrick ASBL	-2	150	0	0	AG	10	1.5	.0	10.0
G. Willow RdEBA	-150	-2	0	-2	AG	350	1.5	.0	10.0
H. Willow RdEBD	0	-2	150	-2	AG	420	1.5	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	15	1.5	.0	10.0
J. Willow RdWBA	150	2	0	2	AG	310	1.5	.0	10.0
K. Willow RdWBD	0	2	-150	2	AG	295	1.5	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	80	1.5	.0	10.0
M. Hetrick ANBA	2	-750	2	-150	AG	170	1.5	.0	10.0
N. Hetrick ANBD	2	150	2	750	AG	140	1.5	.0	10.0
O. Hetrick ASBA	-2	750	-2	150	AG	140	1.5	.0	10.0
P. Hetrick ASBD	-2	-150	-2	-750	AG	210	1.5	.0	10.0
Q. Willow RdEBA	-750	-2	-150	-2	AG	365	1.5	.0	10.0
R. Willow RdEBD	150	-2	750	-2	AG	420	1.5	.0	10.0
S. Willow RdWBA	750	2	150	2	AG	390	1.5	.0	10.0
T. Willow RdWBD	-150	2	-750	2	AG	295	1.5	.0	10.0

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

JOB:
RUN: 2030wP-04 (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:
RUN: 2030wP-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	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	96.	.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	85.	.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.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.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	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.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.	.1	.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:
RUN: 2030wP-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	.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	.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	.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:
RUN: 2030wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. N FrontagNBA	0	-150	0	0	AG	125	1.5	.0	10.0
B. N FrontagNBD	0	0	0	150	AG	0	1.5	.0	10.0
C. N FrontagNBL	2	-150	0	0	AG	50	1.5	.0	10.0
D. N FrontagSBA	0	150	0	0	AG	0	1.5	.0	10.0
E. N FrontagSBD	0	0	0	-150	AG	165	1.5	.0	10.0
F. N FrontagSBL	-2	150	0	0	AG	0	1.5	.0	10.0
G. Willow RdEBA	-150	-2	0	-2	AG	420	1.5	.0	10.0
H. Willow RdEBD	0	-2	150	-2	AG	525	1.5	.0	10.0
I. Willow RdEBL	-150	-2	0	0	AG	0	1.5	.0	10.0
J. Willow RdWBA	150	2	0	2	AG	340	1.5	.0	10.0
K. Willow RdWBD	0	2	-150	2	AG	390	1.5	.0	10.0
L. Willow RdWBL	150	2	0	0	AG	145	1.5	.0	10.0
M. N FrontagNBA	0	-750	0	-150	AG	175	1.5	.0	10.0
N. N FrontagNBD	0	150	0	750	AG	0	1.5	.0	10.0
O. N FrontagSBA	0	750	0	150	AG	0	1.5	.0	10.0
P. N FrontagSBD	0	-150	0	-750	AG	165	1.5	.0	10.0
Q. Willow RdEBA	-750	-2	-150	-2	AG	420	1.5	.0	10.0
R. Willow RdEBD	150	-2	750	-2	AG	525	1.5	.0	10.0
S. Willow RdWBA	750	2	150	2	AG	485	1.5	.0	10.0
T. Willow RdWBD	-150	2	-750	2	AG	390	1.5	.0	10.0

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

JOB:
RUN: 2030wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-8	1.8
2. NW	-7	8	1.8
3. SW	-7	-8	1.8
4. NE	7	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	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	-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	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:
RUN: 2030wP-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	84.	.2	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	84.	.3	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	96.	.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	96.	.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	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	178.	.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	181.	.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	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.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	179.	.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	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-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	.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	.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	.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:
RUN: 2030wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101NBA	0	-150	0	0	AG	0	1.5	.0	10.0
B. SB 101NBD	0	0	0	150	AG	0	1.5	.0	10.0
C. SB 101NBL	2	-150	0	0	AG	0	1.5	.0	10.0
D. SB 101SBA	-4	150	-4	0	AG	270	1.5	.0	10.0
E. SB 101SBD	-4	0	-4	-150	AG	295	1.5	.0	10.0
F. SB 101SBL	-2	150	0	0	AG	20	1.5	.0	10.0
G. Willow RdEBA	-150	-5	0	-5	AG	525	1.5	.0	10.0
H. Willow RdEBD	0	-5	150	-5	AG	305	1.5	.0	10.0
I. Willow RdEBL	-150	-5	0	0	AG	0	1.5	.0	10.0
J. Willow RdWBA	150	5	0	5	AG	215	1.5	.0	10.0
K. Willow RdWBD	0	5	-150	5	AG	485	1.5	.0	10.0
L. Willow RdWBL	150	5	0	0	AG	55	1.5	.0	10.0
M. SB 101NBAX	0	-750	0	-150	AG	0	1.5	.0	10.0
N. SB 101NBDX	0	150	0	750	AG	0	1.5	.0	10.0
O. SB 101SBAX	-4	750	-4	150	AG	290	1.5	.0	10.0
P. SB 101SBDX	-4	-150	-4	-750	AG	295	1.5	.0	10.0
Q. Willow RdEBA	-750	-5	-150	-5	AG	525	1.5	.0	10.0
R. Willow RdEBD	150	-5	750	-5	AG	305	1.5	.0	10.0
S. Willow RdWBA	750	5	150	5	AG	270	1.5	.0	10.0
T. Willow RdWBD	-150	5	-750	5	AG	485	1.5	.0	10.0

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

JOB:
RUN: 2030wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-12	1.8
2. NW	-10	12	1.8
3. SW	-10	-12	1.8
4. NE	7	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	7	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	7	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	7	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	7	600	1.8

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

JOB:
RUN: 2030wP-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	277.	.2	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	277.	.2	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.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	82.	.2	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.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	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	175.	.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	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-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	.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	.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	.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:
RUN: 2030wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	4	-150	4	0	AG	50	1.4	.0	10.0
B. NB 101NBD	4	0	4	150	AG	245	1.4	.0	10.0
C. NB 101NBL	2	-150	0	0	AG	180	1.4	.0	10.0
D. NB 101SBA	0	150	0	0	AG	0	1.4	.0	10.0
E. NB 101SBD	0	0	0	-150	AG	0	1.4	.0	10.0
F. NB 101SBL	-2	150	0	0	AG	0	1.4	.0	10.0
G. Willow RdEBA	-150	-5	0	-5	AG	105	1.4	.0	10.0
H. Willow RdEBD	0	-5	150	-5	AG	155	1.4	.0	10.0
I. Willow RdEBL	-150	-5	0	0	AG	200	1.4	.0	10.0
J. Willow RdWBA	150	5	0	5	AG	135	1.4	.0	10.0
K. Willow RdWBD	0	5	-150	5	AG	270	1.4	.0	10.0
L. Willow RdWBL	150	5	0	0	AG	0	1.4	.0	10.0
M. NB 101NBAX	4	-750	4	-150	AG	230	1.4	.0	10.0
N. NB 101NBDX	4	150	4	750	AG	245	1.4	.0	10.0
O. NB 101SBAX	0	750	0	150	AG	0	1.4	.0	10.0
P. NB 101SBDX	0	-150	0	-750	AG	0	1.4	.0	10.0
Q. Willow RdEBA	-750	-5	-150	-5	AG	305	1.4	.0	10.0
R. Willow RdEBD	150	-5	750	-5	AG	155	1.4	.0	10.0
S. Willow RdWBA	750	5	150	5	AG	135	1.4	.0	10.0
T. Willow RdWBD	-150	5	-750	5	AG	270	1.4	.0	10.0

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

JOB:
RUN: 2030wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-12	1.8
2. NW	-7	12	1.8
3. SW	-7	-12	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
RUN: 2030wP-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	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	275.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.1	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.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	275.	.0	.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	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.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	5.	.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:
RUN: 2030wP-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	.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:
RUN: 2030wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. Thompson NBA	2	-120	2	0	AG	115	1.4	.0	10.0
B. Thompson NBD	2	0	2	150	AG	135	1.4	.0	10.0
C. Thompson NBL	2	-120	0	0	AG	125	1.4	.0	10.0
D. Thompson SBA	-2	120	-2	0	AG	290	1.4	.0	10.0
E. Thompson SBD	-2	0	-2	-150	AG	415	1.4	.0	10.0
F. Thompson SBL	-2	120	0	0	AG	0	1.4	.0	10.0
G. Willow RdEBA	-120	0	0	0	AG	135	1.4	.0	10.0
H. Willow RdEBD	0	0	150	0	AG	0	1.4	.0	10.0
I. Willow RdEBL	-120	-2	0	0	AG	20	1.4	.0	10.0
J. Willow RdWBA	120	0	0	0	AG	0	1.4	.0	10.0
K. Willow RdWBD	0	0	-150	0	AG	135	1.4	.0	10.0
L. Willow RdWBL	120	2	0	0	AG	0	1.4	.0	10.0
M. Thompson NBA	2	-750	2	-150	AG	240	1.4	.0	10.0
N. Thompson NBD	2	150	2	750	AG	135	1.4	.0	10.0
O. Thompson SBA	-2	750	-2	150	AG	290	1.4	.0	10.0
P. Thompson SBD	-2	-150	-2	-750	AG	415	1.4	.0	10.0
Q. Willow RdEBA	-750	0	-150	0	AG	155	1.4	.0	10.0
R. Willow RdEBD	150	0	750	0	AG	0	1.4	.0	10.0
S. Willow RdWBA	750	0	150	0	AG	0	1.4	.0	10.0
T. Willow RdWBD	-150	0	-750	0	AG	135	1.4	.0	10.0

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

JOB:
RUN: 2030wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-7	1.8
2. NW	-8	7	1.8
3. SW	-8	-7	1.8
4. NE	8	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	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	-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	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:
RUN: 2030wP-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	275.	.1	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	271.	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	275.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	174.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.1	.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.	.1	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-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	.1	.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	.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:
RUN: 2030wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OfNBA	2	-150	2	0	AG	325	2.1	.0	10.0
B. SB 101 OfNBD	2	0	2	150	AG	0	2.1	.0	10.0
C. SB 101 OfNBL	2	-150	0	0	AG	220	2.1	.0	10.0
D. SB 101 OfSBA	-4	150	-4	0	AG	655	2.1	.0	10.0
E. SB 101 OfSBD	-4	0	-4	-150	AG	860	2.1	.0	10.0
F. SB 101 OfSBL	-2	150	0	0	AG	150	2.1	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	1245	2.1	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	1370	2.1	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	2.1	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	805	2.1	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	1440	2.1	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	270	2.1	.0	10.0
M. SB 101 OfNBA	2	-750	2	-150	AG	545	2.1	.0	10.0
N. SB 101 OfNBD	2	150	2	750	AG	0	2.1	.0	10.0
O. SB 101 OfSBA	-4	750	-4	150	AG	805	2.1	.0	10.0
P. SB 101 OfSBD	-4	-150	-4	-750	AG	860	2.1	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	1245	2.1	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	1370	2.1	.0	10.0
S. Tefft StWBAX	750	7	150	7	AG	1075	2.1	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	1440	2.1	.0	10.0

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

JOB:
RUN: 2030wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-10	14	1.8
3. SW	-10	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030wP-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	277.	.8	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	174.	.7	.0	.0	.0	.0	.2	.0	.1	.0
3. SW	83.	.8	.0	.0	.0	.0	.1	.0	.0	.3
4. NE	263.	.7	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.7	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	.4	.1	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	175.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	8.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.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.	.6	.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.	.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.	.2	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-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	.1	.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	.4	.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	*	.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	.4	.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	.4	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

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

JOB:
RUN: 2030wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. SB 101 OnNBA	2	-150	2	0	AG	0	2.1	.0	10.0
B. SB 101 OnNBD	2	0	2	150	AG	0	2.1	.0	10.0
C. SB 101 OnNBL	2	-150	0	0	AG	0	2.1	.0	10.0
D. SB 101 OnSBA	0	150	0	0	AG	0	2.1	.0	10.0
E. SB 101 OnSBD	0	0	0	-150	AG	545	2.1	.0	10.0
F. SB 101 OnSBL	-2	150	0	0	AG	0	2.1	.0	10.0
G. Tefft StEBA	-150	-4	0	-4	AG	1220	2.1	.0	10.0
H. Tefft StEBD	0	-4	150	-4	AG	810	2.1	.0	10.0
I. Tefft StEBL	-150	-2	0	0	AG	0	2.1	.0	10.0
J. Tefft StWBA	150	7	0	7	AG	1075	2.1	.0	10.0
K. Tefft StWBD	0	7	-150	7	AG	1075	2.1	.0	10.0
L. Tefft StWBL	150	5	0	0	AG	135	2.1	.0	10.0
M. SB 101 OnNBA	2	-750	2	-150	AG	0	2.1	.0	10.0
N. SB 101 OnNBD	2	150	2	750	AG	0	2.1	.0	10.0
O. SB 101 OnSBA	0	750	0	150	AG	0	2.1	.0	10.0
P. SB 101 OnSBD	0	-150	0	-750	AG	545	2.1	.0	10.0
Q. Tefft StEBAX	-750	-4	-150	-4	AG	1220	2.1	.0	10.0
R. Tefft StEBDX	150	-4	750	-4	AG	810	2.1	.0	10.0
S. Tefft StWBAX	750	7	150	7	AG	1210	2.1	.0	10.0
T. Tefft StWBDX	-150	7	-750	7	AG	1075	2.1	.0	10.0

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

JOB:
RUN: 2030wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	8	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	8	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	8	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	8	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	8	600	1.8

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

JOB:
RUN: 2030wP-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.	.6	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	277.	.6	.0	.0	.0	.0	.0	.0	.3	.0
4. NE	263.	.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	97.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	349.	.2	.0	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	179.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.2	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	182.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.5	.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.	.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.	.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	6.	.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:
RUN: 2030wP-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	.3	.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	.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	.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	.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	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.2	.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	.2	.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:
RUN: 2030wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	101. (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. NB 101NBA	*	4	-150	4	0	*	AG	165	1.7	.0	10.0
B. NB 101NBD	*	4	0	4	150	*	AG	550	1.7	.0	10.0
C. NB 101NBL	*	2	-150	0	0	*	AG	520	1.7	.0	10.0
D. NB 101SBA	*	0	150	0	0	*	AG	0	1.7	.0	10.0
E. NB 101SBD	*	0	0	0	-150	*	AG	0	1.7	.0	10.0
F. NB 101SBL	*	-2	150	0	0	*	AG	0	1.7	.0	10.0
G. Tefft StEBA	*	-150	-7	0	-7	*	AG	565	1.7	.0	10.0
H. Tefft StEBD	*	0	-7	150	-7	*	AG	730	1.7	.0	10.0
I. Tefft StEBL	*	-150	-5	0	0	*	AG	395	1.7	.0	10.0
J. Tefft StWBA	*	150	4	0	4	*	AG	845	1.7	.0	10.0
K. Tefft StWBD	*	0	4	-150	4	*	AG	1210	1.7	.0	10.0
L. Tefft StWBL	*	150	2	0	0	*	AG	0	1.7	.0	10.0
M. NB 101NBAX	*	4	-750	4	-150	*	AG	685	1.7	.0	10.0
N. NB 101NBDX	*	4	150	4	750	*	AG	550	1.7	.0	10.0
O. NB 101SBAX	*	0	750	0	150	*	AG	0	1.7	.0	10.0
P. NB 101SBDX	*	0	-150	0	-750	*	AG	0	1.7	.0	10.0
Q. Tefft StEBAX	*	-750	-7	-150	-7	*	AG	960	1.7	.0	10.0
R. Tefft StEBDX	*	150	-7	750	-7	*	AG	730	1.7	.0	10.0
S. Tefft StWBAX	*	750	4	150	4	*	AG	845	1.7	.0	10.0
T. Tefft StWBDX	*	-150	4	-750	4	*	AG	1210	1.7	.0	10.0

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

JOB:
RUN: 2030wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-14	1.8
2. NW	-7	10	1.8
3. SW	-7	-14	1.8
4. NE	10	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	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	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	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

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

JOB:
RUN: 2030wP-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	277.	.5	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	83.	.4	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	263.	.5	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.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	.1	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.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	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:
RUN: 2030wP-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	.3	.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	.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	.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	.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	.1	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

APPENDIX B

SLOCAPCD CONSTRUCTION EQUIPMENT MITIGATION MEASURES

6.0 EMISSION CALCULATIONS AND MITIGATION FOR CONSTRUCTION IMPACTS

Use of heavy equipment and earth moving operations during project construction can generate fugitive dust and combustion emissions that may have substantial temporary impacts on local air quality. Fugitive dust emissions result from land clearing, demolition, ground excavation, cut and fill operations, and equipment traffic over temporary roads at the construction site. Combustion emissions, such as NOx and diesel particulate matter (diesel PM), are most significant when using large, diesel-fueled scrapers, loaders, dozers, haul trucks, compressors, generators, and other heavy equipment. Emissions can vary substantially from day to day depending on the level of activity, the specific type of operation, and the prevailing weather conditions. Depending on the location and proximity to sensitive receptors, a project that generates high levels of construction emissions, including diesel PM, may require special attention and mitigation and may need to perform a health risk assessment to evaluate short-term exposures to high pollutant concentrations.

Heavy-duty construction equipment is usually diesel powered. In July 1999, the ARB listed the particulate fraction of diesel exhaust as a toxic air contaminant, identifying both chronic and carcinogenic public health risks. As mentioned earlier in this document, no threshold has been established for diesel PM emissions below which there are no significant effects. Therefore, mitigation requirements and the need for development of a health risk assessment will be determined on a case-by-case basis based upon emission levels and the potential risk for human exposure and effects. Diesel PM emissions may therefore be a factor in whether Best Available Control Technology for construction equipment (CBACT) will be needed, even when emissions of criteria pollutants are below the APCD significance thresholds.

(Sections 6.1 and 6.2 intentionally omitted. See SLOCAPCD CEQA document for full text.)

6.3 ROG, NO_X AND DIESEL PM COMBUSTION MITIGATION MEASURES

The measures described below are designed to mitigate combustion emissions from heavy-duty construction equipment. They should be applied as necessary to reduce construction impacts below the significance thresholds. Best Available Control Technology for construction equipment (CBACT) is required when the construction emission thresholds are equaled or exceeded. For large construction projects, off-site emission mitigation may also be required.

Construction Equipment Mitigation Measures

A number of construction equipment mitigation measures including but not limited to those listed below have been shown to significantly reduce emissions while maintaining overall performance of the modified equipment similar to pre-retrofit levels. It should be noted that the following examples are not considered exclusive. District staff recognize the changing nature of engine and combustion technology and thus do not endorse any single technology for use in all situations. Implementation of

a given technology or combination of technologies should always be preceded by an evaluation to determine the most appropriate control strategy. Other control strategies with similar or better emission reduction potential to the following may also be considered if appropriate documentation is provided.

Standard Mitigation Measures for Construction Equipment

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with ARB-certified motor vehicle diesel fuel (non-taxed version suitable for off-road use).
- Maximize to the extent feasible the use of diesel construction equipment meeting the ARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.

CBACT

- Install diesel oxidation catalysts (DOC), catalyzed diesel particulate filters (CDPF), or other District-approved emission-reduction retrofit devices.

The ARB has recently verified DOC and CDPF systems for HD diesel vehicles. DOCs have control efficiencies on the order of 25 percent, while CDPFs can achieve diesel PM reductions of 85 percent or better. In general, DOCs are effective at reducing the fine particle component, while CDPFs are effective at reducing both the fine particle and larger black soot components. Manufacturer data indicates that both types of devices can reduce about 90 percent of CO emissions and 50 to 70 percent of ROG emissions, some being a portion of the diesel PM component. Some devices/systems are being developed that have the added benefit of being able to reduce NO_X emissions.

Determination of the appropriate CBACT control device(s) for the project must be performed in consultation with APCD staff.

Discretionary Mitigation Measures for Construction Equipment

- Electrify equipment where feasible.
- Substitute gasoline-powered for diesel-powered equipment, where feasible.
- Use alternatively fueled construction equipment on site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel.
- Use equipment that has Caterpillar pre-chamber diesel engines.
- Implement activity management techniques as described in Section 6.4.

6.4 ACTIVITY MANAGEMENT TECHNIQUES

a. Develop a comprehensive construction activity management plan designed to minimize the amount of large construction equipment operating during any given time period.

b. Schedule construction truck trips during non-peak hours to reduce peak hour emissions.
c. Limit the length of the construction work-day, if necessary.
d. Phase construction activities, if appropriate.

6.5 FUGITIVE PM_{10} MITIGATION MEASURES

The following mitigation measures are required for all projects that exceed the mitigation thresholds identified above. Proper implementation of these measures will achieve a significant reduction in fugitive dust emissions.

a. Reduce the amount of the disturbed area where possible.

b. Use water trucks or sprinkler systems to prevent airborne dust from leaving the site. Increase watering frequency whenever wind speed exceeds 15 mph. Reclaimed (nonpotable) water should be used whenever possible.

c. Spray all dirt stock-pile areas daily as needed.

d. Implement permanent dust control measures identified in the approved project revegetation and landscape plans as soon as possible following completion of any soil-disturbing activities.

e. Sow exposed ground areas that are planned to be reworked at dates more than one month after initial grading with a fast-germinating native grass seed, and water until vegetation is established.

f. Stabilize all disturbed soil areas not subject to revegetation using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD.

g. Complete all roadways, driveways, sidewalks, etc., to be paved as soon as possible. In addition, lay building pads as soon as possible after grading unless seeding or soil binders are used.

h. Construction vehicles shall not exceed a speed of 15 mph on any unpaved surface at the construction site. SLOAPCD CEQA Air Quality Handbook 2003

i. Cover trucks hauling dirt, sand, soil, or other loose materials or maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.

j. Install wheel washers where vehicles enter and exit unpaved roads, or wash off trucks and equipment leaving the site.

k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Use water sweepers with reclaimed water where feasible.

All PM_{10} mitigation measures required must be included on grading and building plans. In addition, the contractor or builder should designate a monitor for the dust control program and order increased watering, as necessary, to prevent transport of dust off site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

ATTACHMENT A

CONCEPT PLANS

N

0 375 750
Feet

SOURCE: COUNTY OF SAN LUIS OBISPO (AERIAL), RAJAPPAN & MEYER CONSULTING ENGINEERS, INC. (CAD).

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Willow Road Extension/US 101 Interchange

Concept Plans