Appendix F1
AIR QUALITY IMPACT ANALYSIS

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HENRY MAYO NEWHALL MEMORIAL HOSPITAL MASTER PLAN

CITY OF SANTA CLARITA

LSA

June 2008

AIR QUALITY IMPACT ANALYSIS

HENRY MAYO NEWHALL MEMORIAL HOSPITAL MASTER PLAN

CITY OF SANTA CLARITA, CALIFORNIA

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LSA

June 2008

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EXECUTIVE SUMMARY

The proposed project would result in the exceedance of the daily emissions threshold for nitrous oxides (NO_X) from project-related net increase in vehicular and stationary sources emissions. Carbon monoxide (CO) concentrations would remain below both State and federal CO standards. In addition, there would not be any significant cumulative air quality impacts as a result of the proposed project. During construction, project emissions would not exceed the SCAQMD emission thresholds, however, even with all feasible mitigation measures the emissions of particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would potentially result in short-term exceedances of the PM_{10} and $PM_{2.5}$ ambient air quality standards (AAQS) at nearby residences.

INTRODUCTION

This air quality impact analysis has been prepared to evaluate the potential air quality impacts associated with the Henry Mayo Newhall Memorial Hospital (HMNMH) Master Plan project in the City of Santa Clarita, California. This report is intended to satisfy the requirements for a project-specific air quality impact analysis by examining the impacts of the proposed project and evaluating the measures recommended to be incorporated as part of the project design.

The air quality study provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The analysis also provides data on existing air quality, evaluates potential air quality impacts associated with the proposed project, and identifies - measures recommended to limit potential impacts. Modeled air quality levels are based upon vehicle data and project trip generation included in a traffic study prepared for the proposed project (Austin-Foust Associates, Inc. [AFA] October 2007).

The evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD California Environmental Quality Act (CEQA) *(CEQA) Air Quality Handbook* (SCAQMD, April 1993).

Project Description

The project sponsors, Henry Mayo Newhall Memorial Hospital (HMNMH) and G&L Realty, propose a Master Plan to guide future development of the inpatient (hospital) and outpatient Medical Office Buildings (MOBs) and administrative medical facilities at the existing HMNMH medical campus. The Master Plan is designed to provide additional enhanced inpatient and outpatient treatment capacity. At build out, the amount of hospital and medical office space on the site (not including parking structures) would increase by 327,363 square feet (sf) to 667,434 sf, nearly double that of its current 340,071 sf. As currently proposed, the Master Plan would be implemented over an approximately 15-year period.

The HMNMH Master Plan project site encompasses approximately 30.4 acres of land generally located north of the intersection of McBean Parkway and Orchard Village Road, east of the Interstate 5 (I-5) freeway in the City of Santa Clarita. The project area is within the existing HMNMH medical campus located at 23845 McBean Parkway. Figure 1 illustrates the location and vicinity of the proposed project.

The approximately 30.4-acre site is developed with the existing HMNMH medical campus. Currently (2007/2008), the medical campus occupies 340,071 sf of building area in 11 buildings, comprising 104,160 sf of medical offices (including the 8,000 sf Foundation building), and 235,911 sf of hospital-related and support facilities floor area. The hospital-related uses include the 146,000 sf hospital, 63,800 sf Hospital Pavilion, 9,122 sf bridge, 5,286 sf hospital basement, the 8,585 sf mechanical plant, 2,384 sf facilities warehouse building, and 734 sf facilities office building. Table A presents the square footage of the various buildings, bed count, and building height, and identifies those facilities that have been approved and are under construction.

The project sponsors are proposing a long-range Master Plan for the buildout of the HMNMH medical campus. The Master Plan will include the provision of an additional 120 inpatient hospital beds, 18 additional beds in the hospital's Intensive Care Unit, nine additional beds in the existing Hospital Pavilion Building, 200,000 gross square feet of new medical office space to be used for additional outpatient, hospital administration, and associated medical uses, and an additional 1,263 parking spaces than what currently exists on the hospital campus. It is anticipated that nine new structures will be constructed on the existing 30.4-acre hospital campus built over a 15-year period, as outlined in the Development Program. Figure 2 illustrates the project's Proposed Campus Master Plan.

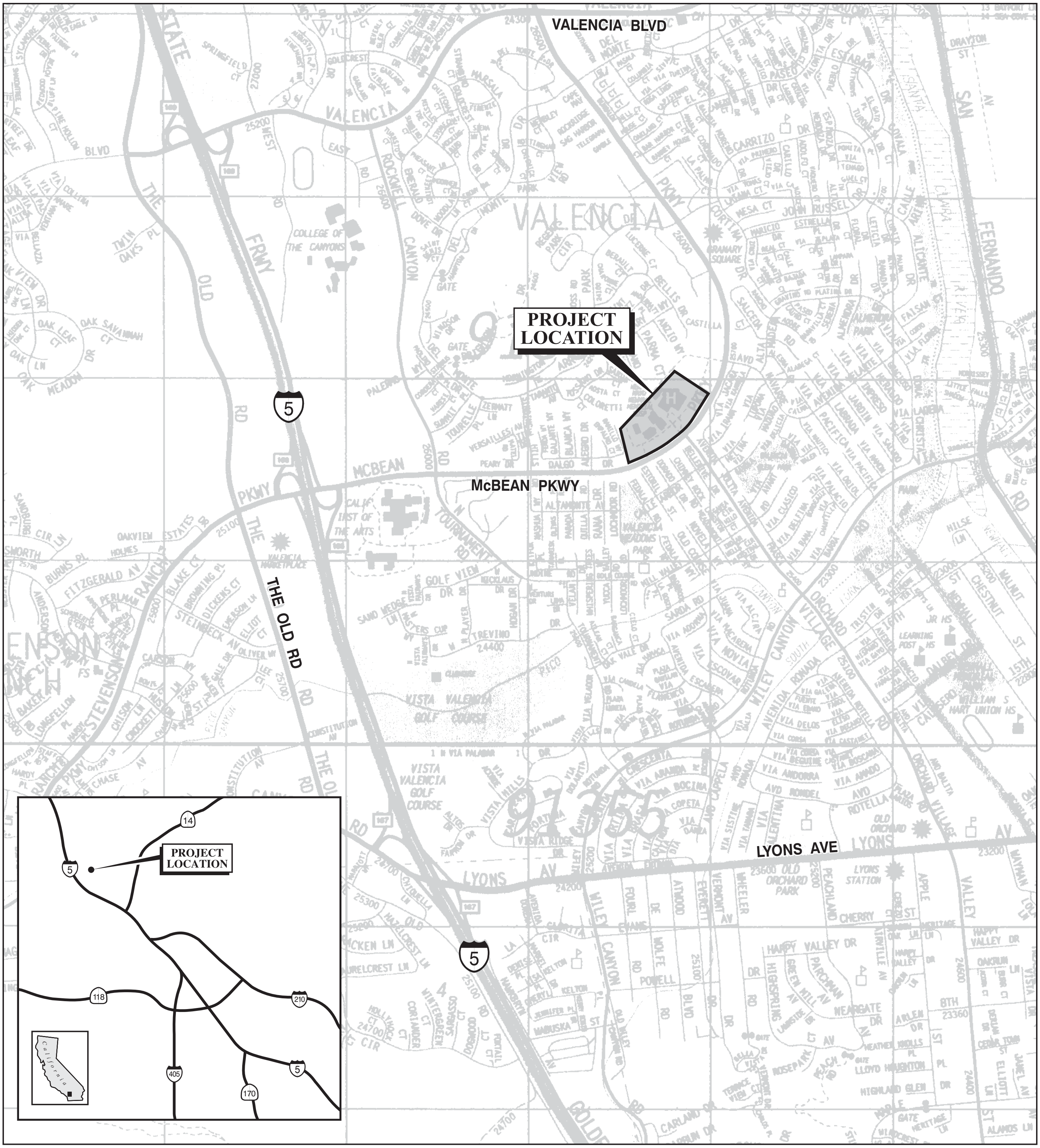

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FIGURE 1

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SOURCE: The Thomas Guide, 2005

Newhall Hospital

Project Location

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Table A: Existing Medical Campus Facilities and Uses (2007/2008)

Use	Existing Facilities (sf)	Hospital Beds	Building Height (ft)
Hospital and Related Uses			
Main Hospital[1]	146,000	121	44
Main Hospital Basement	5,286		N/A
Hospital Pavilion Building	63,800	100	35
Subtotal Hospital and Related Uses	**215,086**		
Support Facilities Uses			
Hospital Bridge (covered walkway)	9,122		N/A
Mechanical Plant	8,585		22
Facilities Building (warehouse)	2,384		
Facilities Building (office)	734		26.5
Helipad	-		N/A
Subtotal Support Facilities Uses	**20,825**		
Medical Office Buildings			
Medical Office Building A	5,302		18
Medical Office Building B	5,302		18
Medical Office Building C	5,302		18
Medical Office Building D	5,302		18
Medical Office Building E	31,040		29
Medical Office Building F/Sheila R. Veloz Breast Imaging Center	43,912		33
Foundation and Administration Office Building	8,000		12
Subtotal Medical Office Buildings	**104,160**		
Total	**340,071**	**221**	
Site Acreage	**30.4**		

Source: HMNMH Master Plan, May 2008.

[1] The total square footage for the Main Hospital includes 5,518 sf for the Emergency Department and 5,857 sf for Radiology (2,952 sf existing and 2,502 sf in construction).

ft = feet
N/A = Not applicable
sf = square feet

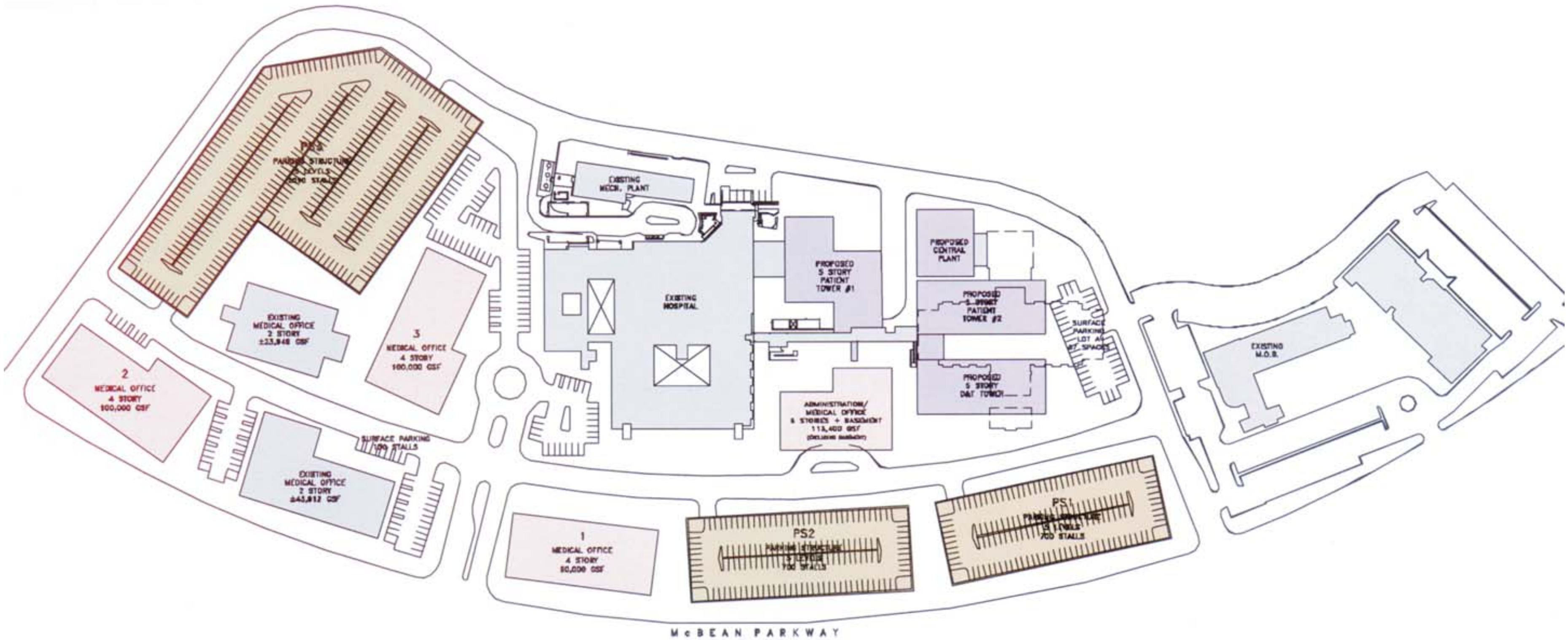

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FIGURE 2

0 120 240
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SOURCE: Langdon Wilson

Newhall Hospital

Master Site Plan

I:\RBF435\G\Site Plan.cdr (4/26/05)

Table B and Table C summarize the various facilities proposed under the HMNMH Master Plan.

Table B: Proposed Medical Campus Facilities (New Buildings)

New Buildings	Size (sf)	Building Height[1] (ft)
Inpatient Building	125,363	85
MOB-1	80,000	45.5
MOB-2	60,000	45.5
MOB-3	60,000	45.5
Central Plant	10,000	26
Total	**335,363**	

Source: HMNMH Master Plan, March 2008.
[1] Measured to the top of the parapet.
ft = feet
MOB = Medical Office Building
sf = square feet

Table C: Proposed Medical Campus Facilities (New Parking Structures)

New Parking Structures	Size (sf)	Number of Parking Spaces	Number of Levels Above Ground	Number of Levels Below Ground	Building Height[1] (ft)
Parking Structure 1	279,000	750	5	1	47
Parking Structure 2	200,334	579	5	1	47
Parking Structure 3	92,421	278	3	1	27
Parking Structure 4	85,000	316	N/A	2	Surface
Total	**656,755**	**1,917**			

Source: HMNMH Master Plan, March 2008.
[1] Measured to the top of the parapet.
ft = feet
sf = square feet

In addition to construction of the above facilities, the HMNMH Master Plan proposes to:

- Add 13 new beds in the Hospital Pavilion Building.
- Demolish the 8,000 sf Foundation building to accommodate MOB-3.
- Reconfigure surface parking to provide a total of 308 on-site spaces.
- Provide a helipad on the rooftop of both Parking Structure 1 (PS-1) and Inpatient Building A.
- Provide right-turn pockets and modify traffic signals along McBean Parkway project frontage.

- Reconfigure 9,770 sf of current administration space in the existing hospital building to accommodate 18 additional new ICU beds. The current hospital administrative functions would move to space within MOB-1.
- Export up to 93,293 cubic yards of dirt associated with subsurface excavation for Inpatient Building A and PS-1, PS-2, PS-3, and PS-4.
- Dedicate a minimum of 58 ft of public right-of-way from the centerline along the project frontage.

Helipad Proposal

The hospital is used by Los Angeles County Fire and Los Angeles County Sheriff air operations, as well as Mercy Air and other medical transport services, as a receiving location for patients flown in and out by helicopter. As part of the Master Plan, HMNMH is proposing to construct two separate above-grade helipads. The first helipad would be constructed on the roof of Parking Structure 1 to be built along McBean Parkway. With the parking structure slated to be one of the first facilities in place, this will allow the resumption of emergency air ambulance service in the most time-efficient manner. A designated elevator will be constructed to transport patients from the parking structure roof to the ground level, where they will be transported by an on-site vehicle around the ring load and into the hospital building. This near-term helipad location will be approximately 250 ft from the nearest residence across McBean Parkway.

The second helipad location will be on the roof of the Inpatient Building, which is designed to be approximately 85 ft high and approximately 240 ft from the nearest residence within the Summit community. The placement of a helipad at this location will allow for the most efficient transport to the emergency room, as the roof will be equipped with a direct elevator connection. This will be the ultimate location for the helipad

HMNMH is requesting that the initial helipad to be built on Parking Structure 1 be allowed to remain once the ultimate inpatient building helipad is constructed. This is for two reasons: to keep a secondary helipad for use during a major disaster/emergency and for use during future construction activities on the hospital campus that may temporarily preclude use of the Inpatient Building helipad due to aeronautical safety concerns. Outside of these two situations, both helipads would not be operational at the same time.

EXISTING ENVIRONMENTAL SETTING

Regional Air Quality. The project site is located in an unincorporated portion of Los Angeles County, within the City of Santa Clarita. The project site is located within the South Coast Air Basin (Basin), which includes Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality regulation in the Basin is administered by the SCAQMD, a regional agency created for the Basin.

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

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than that of inland areas. The climatological station closest to the site is the San Fernando Station.[1] Although this station was closed after 1974; the monitored temperatures are considered representative for the project area. The annual average maximum temperature recorded between 1927 and 1974 at this station is 78.2°F, and the annual average minimum is 49.3°F. January is typically the coldest month in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin along the coastal side of the mountains. Average rainfall measured at the San Fernando Station varied from 3.53 inches in January to 0.41 inch or less between May and October, with an average annual total of 16.16 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

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

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

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

1 Western Regional Climatic Center, at Web site wrcc.dri.edu, 2008.

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

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

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

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

California is the second-largest emitter of GHG in the United States, only surpassed by Texas, and the tenth largest GHG emitter in the world (California Energy Commission [CEC] 2006). However, because of more stringent air emission regulations, in 2001 California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in CO_2 emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services). In 2002, California produced 493 million metric tons of CO_2-equivalent GHG emissions, of which 81 percent are CO_2 emissions from fossil fuels combustion, 2.3 percent were from other sources of CO_2, 6.4 percent were from methane, and 6.8 percent were from nitrous oxide. The remaining 3.5 percent of GHG emissions were from High Global Warming Potential gases (CEC 2006).

GHG emissions from anthropogenic (human) activities represent 84 percent of the total GHG emissions. California's transportation sector is the single largest source of GHG emissions, producing

1 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2001: The Scientific Basis*, http://www.grida.no/climate/ipcc_tar/wg1/index.htm.

41.2 percent of the State's total emissions. Industry is California's second largest source of GHG emissions, producing 22.8 percent of the State's total emissions. Electricity generation is the third largest source of California's GHG emissions, comprising 19.6 percent. Though electricity generated out of state for use in California comprises only one-fifth to one-third of the total electricity supply, it contributes 50 percent of the GHG emissions associated with electricity consumption in California. Other major sources of GHG emissions include mineral production, waste combustion and land use, and forestry changes. Agriculture, forestry, commercial, and residential activities comprise the balance of California's GHG emissions (CEC 2006).

Local Air Quality. The proposed site is located within the SCAQMD's jurisdiction. The SCAQMD maintains ambient air quality monitoring stations throughout the Basin. The air quality monitoring station closest to the site with more complete air quality data is the Santa Clarita Station. The criteria pollutants monitored at this station are shown in Tables D and E. CO and nitrogen dioxide (NO_2) levels monitored at this station have not exceeded State and federal standards in the past three years. Ozone (O_3) concentrations monitored at this station exceeded the State one-hour O_3 standard from 62 to 69 days per year in the past three years. The federal eight-hour O_3 standard was exceeded from 40 to 52 days per year. PM_{10} monitored at this station exceeded the State 24-hour standard 1 day per year for the past three years, but did not exceed the federal standard. The Burbank-West Palm Avenue Station is the closest station that monitors $PM_{2.5}$ and sulfur dioxide (SO_2). Data for $PM_{2.5}$ and SO_2 taken from the Burbank-West Palm Avenue Station are included in Tables D and E. The federal $PM_{2.5}$ standard was not exceeded in the past three years. There is no separate State 24-hour $PM_{2.5}$ standard. The federal and State standards for SO_2 were not exceeded in the past 10 years.

Table D: Ambient Air Quality at Santa Clarita Air Monitoring Station

	One-Hour Carbon Monoxide		**One-Hour Ozone**		**Coarse Suspended Particulate (PM_{10})**		**Nitrogen Dioxide**	
	Max. 1-Hour Conc. (ppm)[1]	**Number of Days Exceeded**	**Max. 1-Hour Conc. (ppm)**	**Number of Days Exceeded**	**Max. 24-Hour Conc. (µg/m³)**	**Number of Days Exceeded**	**Max. Conc. (ppm)**	**Number of Days Exceeded**
State Stds.	> 20 ppm/1 hr		> .09 ppm/1 hr		> 50 µg/m³, 24 hrs		> .18 ppm/1 hr	
2006	2.0	0	0.16	62	53	1	0.08	0
2005	2.2	0	0.17	65	55	1	0.09	0
2004	5.2	0	0.16	69	54	1	0.09	0
MAXIMUM	**5.2**		**0.17**		**55**		**0.09**	
Federal Stds.	> 35 ppm/1 hr		No federal standard		> 150 µg/m³, 24 hrs		0.053 ppm, annual average	
2006	2.0	0	0.16	NA[2]	53	0	0.018	0
2005	2.2	0	0.17	NA	55	0	0.019	0
2004	5.2	0	0.16	NA	54	0	0.020	0
MAXIMUM	**5.2**		**0.17**		**55**		**0.020**	

Source: ARB and EPA 2004–2006.
[1] Data taken from the EPA Web site; others taken from Air Resources Board (ARB) Web site.
[2] Not applicable. Federal 1-hour ozone standard was revoked in 2005.

Table E: Ambient Air Quality at Santa Clarita Air Monitoring Station

	Eight-Hour Carbon Monoxide		Eight-Hour Ozone		Fine Suspended Particulate ($PM_{2.5}$)[1]		Sulfur Dioxide[1]	
	Max. 8-Hour Conc. (ppm)	Number of Days Exceeded	Max. 8-Hour Conc. (ppm)	Number of Days Exceeded	Max. 24-Hour Conc. (µg/m)	Number of Days Exceeded	Max. 24-Hour Conc. (ppm)	Number of Days Exceeded
State Stds.	9.0 ppm/8 hrs		> 0.07 ppm/8 hrs		No 24-hrs State Standard		> .04 ppm/24 hrs	
2006	1.3	0	0.12	NA[2]	51	NA	0.004	0
2005	1.3	0	0.14	NA	63	NA	0.006	0
2004	3.7	0	0.13	NA	60	NA	0.009	0
MAXIMUM	**3.7**		**0.14**		**63**		**0.009**	
Federal Stds.	9.0 ppm/8 hrs		> .075 ppm/8 hrs		> 35 $\mu g/m^3$, 24 hrs		0.14 ppm/24 hrs	
2006	1.3	0	0.12	40	51	ND[3]	0.001	0
2005	1.3	0	0.14	47	63	ND	0.002	0
2004	3.7	0	0.13	52	60	ND	0.003	0
MAXIMUM	**3.7**		**0.14**		**63**		**0.003**	

Source: ARB 2004–2006.
[1] Data taken from Burbank-W Palm Avenue Station, the closest station that monitors $PM_{2.5}$ and sulfur dioxide data.
[2] Not established.
[3] No data available.

REGULATORY SETTING.

The following discusses federal, State, and regional regulatory requirements.

Federal Regulations/Standards. Pursuant to the federal Clean Air Act (CAA) of 1970, the United States Environmental Protection Agency (EPA) established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and state governments have established 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 of the environment (e.g., impairment of visibility, damage to vegetation and property). The six criteria pollutants are O_3, CO, PM_{10}, NO_2, SO_2, and lead (Pb). The primary standards for these pollutants are shown in Table F and the health effects from exposure to the criteria pollutants are described in Table G. The concentration standards were set at a level that protects public health with adequate margin of safety (EPA); therefore, these health effects would not occur unless the standards are exceeded by a large margin. In July 1997, the EPA adopted new standards for eight-hour O_3 and $PM_{2.5}$, as shown in Table F.

Table F: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		--		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (56 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (338 µg/m^3)		—		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	—	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		—	—	
Lead[8] (Pb)	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[8]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB (4/1/08).

Footnotes:

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

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

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

4 Any equivalent procedure 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 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.

Table G: Health Effects Summary of Some of the Common Pollutants Found in Air

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

Source: ARB 2005.

Data collected at permanent monitoring stations are used by the EPA to classify regions as "attainment" or "nonattainment," depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table H lists the air quality attainment status for the Basin.

Table H: South Coast Air Basin Attainment Status

	State	Federal
One-Hour O_3	Nonattainment	Revoked June 2005
Eight-Hour O_3	Not Established	Severe 17 Nonattainment (attainment date 2021)
$PM_{2.5}$	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Serious Nonattainment
CO	Attainment	Serious Maintenance
NO_2	Attainment	Attainment/Maintenance
All Others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB and SCAQMD, 2008

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

The EPA established new national air quality standards for ground-level O_3 and $PM_{2.5}$ in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O_3 and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the 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 O_3 and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new O_3 rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules. In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the 8-hour ground-level O_3 standard. The EPA issued the proposed rule implementing the 8-hour O_3 standard in April 2003. The EPA completed final 8-hour nonattainment status on April 15, 2004. The EPA revoked the 1-hour O_3 standard on June 15, 2005.

The EPA issued the final $PM_{2.5}$ implementation rule in fall 2004. The EPA issued final designations on December 14, 2004. The EPA lowered the 24-hour $PM_{2.5}$ standard from 65 to 35 micrograms per cubic meter ($\mu g/m^3$) and revoked the annual PM_{10} standard on December 17, 2006.

Currently there are no adopted regulations to combat global climate change on a national level. However, recent statutory authority has been granted to the EPA that may change the voluntary approach taken under the current administration to address this issue. On April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO_2 emissions under the federal CAA. Consequently, the regulation of GHG emissions on a national level by the EPA is forthcoming.

State Regulations/Standards. The State of California began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates (SO_4), hydrogen sulfide (H_2S), vinyl chloride (VC), and visibility-reducing particles. These standards are also listed in Table F.

Originally, there were no attainment deadlines for the CAAQS. However, the California Clean Air Act (CCAA) of 1988 provided a time frame and planning structure to promote their attainment.

The CCAA required nonattainment areas in the State to prepare attainment plans and proposed to classify each such area on the basis of the submitted plan, as follows: moderate, if CAAQS attainment could not occur before December 31, 1994; serious, if CAAQS attainment could not occur before December 31, 1997; and severe, if CAAQS attainment could not be conclusively demonstrated at all.

The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented. The Basin is currently classified as a nonattainment area for three criteria pollutants: ozone, PM_{10}, and $PM_{2.5}$.

Assembly Bill 32 (AB 32), the "Global Warming Solutions Act," was passed by the California State legislature on August 31, 2006. AB 32 requires the State's global warming emissions to be reduced to 1990 levels by year 2020 and by 80 percent of 1990 levels by year 2050. Pursuant to the requirements of AB 32, the State's reduction in global warming emissions will be accomplished through an enforceable statewide cap on global warming emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels by January 2008. ARB must prepare a plan demonstrating how the 2020 deadline can be met by January 1, 2009, or earlier. However, as immediate progress in reducing GHG can and should be made, AB 32 directed ARB and the newly created Climate Action Team (CAT) to identify a list of "discrete early action GHG reduction measures" that can be adopted and made enforceable by January 1, 2010. CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB's jurisdiction.

To address GHG emission and global climate change in General Plans and CEQA documents, Senate Bill 97 (Chapter 185, 2007) requires the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines on how to address global warming emissions and mitigate project-specific GHG. OPR is required to prepare, develop, and transmit these guidelines on or before July 1, 2009. Until such a plan has been adopted, direction for evaluation of and potential mitigation for incremental project impacts to global warming is not available.

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

The ARB 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 SIP for 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 basins has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans. The CCAA provides the SCAQMD 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.

Regional Air Quality Management Plan. The SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. Regional AQMPs were adopted for the Basin for 1979, 1982, 1989, 1991, 1994, 1997, and 2003.

The SCAQMD Governing Board approved the 1997 AQMP on November 15, 1996. After approval, the AQMP was submitted to the ARB for its review and approval. The ARB approved the O_3 and PM_{10} portions of the 1997 AQMP on January 23, 1997, and submitted the plan to the EPA as proposed revisions to the SIP. The EPA rejected the District's revision of its 1997 AQMP in January 1999. The rejection, however, covers only the provisions of the AQMP designed to attain the federal O_3 standard. As a result of the rejection, the SCAQMD prepared a draft "Proposed 1999 Amendment to the 1997 Ozone SIP Revision for the South Coast Air Basin" on October 7, 1999, for public review and comment. The 1999 Amendment proposed to revise the O_3 portion of the 1997 AQMP that was submitted to the EPA as a revision to the South Coast Air Basin portion of the 1994 California O_3 SIP. The SCAQMD Governing Board adopted the "1999 Amendment to the 1997 Ozone SIP Revision for the South Coast Air Basin" on December 10, 1999. In addition, the SCAQMD Governing Board settled with three environmental organizations on its litigation of the 1994 O_3 SIP.

The SCAQMD adopted a comprehensive plan update, the 2003 AQMP, for the Basin on August 1, 2003. The 2003 AQMP seeks to demonstrate attainment with State and federal air quality standards and will incorporate a revised emissions inventory, the latest modeling techniques, and updated control measures remaining from the 1997/1999 SIP and new control measures. The SCAQMD submitted the 2003 AQMP to the ARB and EPA for their review and approval in early August 2003. The ARB approved the 2003 AQMP in October 2003 and submitted its recommended modifications to the EPA for approval.

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

METHODOLOGY AND THRESHOLDS OF SIGNIFICANCE

Methodology

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

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips. In addition, localized air quality impacts, i.e., slight increase in CO concentrations (CO hot spots) near intersections or roadway segments in the project vicinity, would come from project-related vehicle trips.

CO concentrations were predicted for the existing (2007), interim year without and with the project, and cumulative conditions without and with the project, based on traffic data provided in the traffic study for this project. CALINE4, the fourth generation California Line Source Dispersion Model developed by the California Department of Transportation (Caltrans), was used to calculate the CO concentrations. Input data for this model include meteorology, street network geometrics, traffic information, and emission generation rates. Meteorological data required include temperature, sigma theta (standard deviation of wind direction change), wind direction, and wind speed. Street network geometrics require use of an "x, y" coordinate system onto which the modeled roadway can be overlaid in order to identify the relative locations of the traffic lane(s) and nearby receptor(s). Required traffic information included peak-hour traffic volumes, speed limit, level of service, and signal cycle times. Emission factors were calculated using the ARB EMFAC2007 emission factors.

Output from the model includes one-hour CO concentrations in parts per million (ppm) at selected receptor locations. To reflect total concentrations, the ambient CO concentration of the vicinity must be added to the CO concentration predicted by CALINE4. Based on the methodology suggested by the EPA and included in Caltrans CO Protocol, the existing ambient concentration was determined as the higher of the second highest annual one-hour and annual eight-hour observation at the nearest representative monitoring station over the past two years. Ambient concentrations for 2007, interim year, and long-range cumulative year scenarios are assumed to be the same as the existing levels, which were determined to be the higher of the second highest CO concentrations monitored in the past three years at the nearest monitoring station, for the worst-case scenario. The predicted CALINE4 concentration is calculated for the one-hour averaging time. The one-hour CO concentrations predicted by CALINE4 were multiplied by a persistence factor of 0.7 to determine the predicted eight-hour CO concentrations.

Regional emissions were calculated from motor vehicles. Predictions for air pollutant emissions generated by the project traffic were calculated with the URBEMIS2007 model, based on the trip generations projected for the project from the traffic study (AFA, October 2007). Emissions from stationary sources such as natural gas usage were also calculated with URBEMIS2007.

The SCAQMD has developed localized significance threshold (LST) methodology that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or State AAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area. SCAQMD's current guidelines, *Final Localized Significance Threshold Methodology* (June 2003), were adhered to in the assessment of air quality impacts for the proposed project.

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

Global warming and GHGs are an emerging environmental concern being raised on statewide, national, and global levels. Regional, State, and federal agencies are developing strategies to control pollutant emissions that contribute to global warming. However, neither CEQA nor the CEQA Guidelines mention or provide any methodology for analysis of GHGs, including CO_2, nor do they provide any significance thresholds. This air quality analysis follows all procedures and requirements of the State CEQA and the SCAQMD CEQA Handbook. Evaluation of any potential global warming effects resulting from the project, including modeling and gauging the impacts associated with an increase of trips or generation of new trips, and the effect on the greenhouse effect or global warming would be entirely speculative since no modeling protocol or significance criteria have been established.

Thresholds of Significance

Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD's *CEQA Air Quality Handbook*. The criteria include emissions thresholds, compliance with State and national air quality standards, and consistency with the current AQMP.

Thresholds for Construction and Operational Emissions

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

Table I: SCAQMD Significance Thresholds

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

Source: SCAQMD, 2008.

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

Standards for Pollutants with Localized "Hot Spot" Effects. Air pollutant standards for CO are as follows:

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. When ambient levels are below the standards without the project emissions, a project is considered to have significant impacts if project-related emissions result in an exceedance of one or more of these standards. According to Section 9.4 of the SCAQMD *CEQA Air Quality Handbook*, if ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 ppm or more or eight-hour CO concentrations by 0.45 ppm or more.

Thresholds for Localized Significance

For this project, the appropriate Source Receptor Area (SRA) is Santa Clarita Valley (Area 13).[1] LST analysis for construction is applicable to all projects of 5 ac and less. If emissions exceed the LST for a 5 ac site, then dispersion modeling needs to be conducted. However, the use of the 5 ac site model for the project site would result in more stringent LSTs because emissions would occur in a more concentrated area closer to the nearest sensitive receptors than would occur in reality, due to the project site being approximately 30 ac. Projects larger than 5 ac can determine the localized significance for construction by performing dispersion modeling for emissions that exceed the localized air quality standards.

There are existing residential uses to the west at a distance of approximately 50 feet (ft) (15 meters [m]) from the closest construction area. Based on SCAQMD LST guidelines, receptors closer than 25 m should use the thresholds for 25 m to determine the potential LST impacts. Table J lists the LST thresholds for 25 m that were used.

Table J: Santa Clarita Valley LST Thresholds at 25 Meters

Air Pollutant	Threshold (lbs/day)	
	Construction	Operation
CO	1,046	1,046
NO_X	319	319
PM_{10}	12	3
$PM_{2.5}$	6	2

Source: SCAQMD, 2008.

Global Warming

Global climate change may result in significant adverse effects to the environment that will be experienced worldwide, with some specific effects felt in California. Assembly Bill (AB 32) requires statewide GHG emissions reductions to 1990 levels by 2020. Though these statewide reductions are now mandated by law, no generally applicable GHG emission threshold has yet been established, nor will guidance on global climate change analysis in CEQA documents be available until mid-2009.

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public

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

agency involved, based to the extent possible on scientific and factual data," and further, that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting." The State CEQA Guidelines further indicate that even when thresholds are established, they may include "identifiable quantitative, qualitative or performance level of a particular environmental effect" (State CEQA Guidelines, Section 15064.7).

Some suggest that a zero emissions threshold would be appropriate in a climate change analysis; however, most feel that this would stop all progress and interfere with the ability of the economy to function. Further, prior CEQA case law makes clear that the "one additional molecule" rule is not consistent with CEQA (Communities for a Better Environment v. California Resources Agency, 103 Cal. App. 4th 98 (2002). Such a rule also appears inconsistent with the State's approach to mitigation of climate change impacts. AB 32 does not prohibit all new GHG emissions; rather, it requires a reduction in statewide emissions to a given level. Thus, AB 32 recognizes that GHG emissions will continue to occur.

The California Air Pollution Control Officers Association (CAPCOA) recently published a White Paper (January 2008) that explored several options for setting numeric, non-zero thresholds. The White Paper acknowledges medium to high uncertainty as to each potential numeric threshold "due to the uncertainty associated with the effectiveness of AB 32 implementation overall, the new character of GHG reduction strategies on a project basis, the immaturity of GHG reduction technologies or infrastructure (such as widespread biodiesel availability), and the uncertainty of GHG reduction effectiveness of certain technologies (such as scientific debate concerning the relative lifecycle GHG emissions of certain biofuels, for example)." When applied to residential examples, the thresholds discussed would range from approximately 50 single-family dwelling units to 2,600 residential units as screening thresholds; commercial thresholds would rely on square footage. Application of those thresholds, however, may first require enactment of a specific Climate Action Plan in a General Plan or other large-scale policy document. Based on the above, none of the potential numeric thresholds would be appropriate for application to this project. Thus, for the purposes of analyzing this project, and consistent with one of CAPCOA's identified approaches to climate change analysis, the potential climate change impacts will be analyzed without setting a specific threshold.

Climate change is a global environmental problem; therefore, this study addresses climate change as a cumulative impact. To the extent possible, this study assesses potential sources of GHG emissions from the project and quantifies those emissions.

Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis in this report is based on methodologies and information available at the time the study was prepared. Estimation of GHG emissions in the future do not account for changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered. Additionally, as explained in greater detail below, many uncertainties exist regarding the precise relationship between specific levels of GHG emissions and the ultimate impact on global climate. Significant uncertainties also exist regarding the reduction potential of potential mitigation strategies. Thus, while information is presented below to assist the public and the City's decision makers in understanding the project's potential contribution to global climate change impacts, the information available to the City is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

Because no applicable numeric thresholds have yet been defined, and because the precise causal link between an individual project's emissions and global climate change has not been developed, this study also identifies qualitative factors to determine whether this project's emissions should be considered "cumulatively considerable." Some of those qualitative factors compare the proposed project to potential "business as usual" conditions. Such comparison is appropriate in the case of this climate change analysis because the statewide GHG reduction strategy involves reducing future emissions compared to future emissions under a "business as usual" scenario. Until the City or other regulatory agency devises a generally applicable climate change threshold, the analysis used in this study may or may not be applicable to other City projects.

IMPACTS AND RECOMMENDED MEASURES

Project Impacts

Air pollutant emissions associated with the project would occur over the short term from demolition and construction activities, such as fugitive dust from site preparation and grading and emissions from equipment exhaust. There would be long-term regional emissions associated with project-related vehicular trips and stationary source emissions by the proposed project. Long-term local CO emissions at intersections in the project vicinity are not expected to be significantly affected by project-related traffic.

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

Construction activities associated with new development occurring on the project site would temporarily increase localized PM_{10}, ROC, NO_X, and CO concentrations in the project vicinity. The primary sources of construction-related ROC and NO_X emissions are gasoline- and diesel-powered, heavy-duty mobile construction equipment such as scrapers and motor graders. Primary sources of PM_{10} emissions would be clearing activities, excavation and grading operations, construction vehicle traffic on unpaved ground, and wind blowing over exposed earth surfaces.

Emissions generated from construction activities are anticipated to cause temporary increases in pollutant concentrations that could contribute to the continuing violations of the federal and State maximum concentration standards. The frequency and concentrations of such violations would depend on several factors, including the soil composition on the site, the amount of soil disturbed, wind speed, the number and type of machinery used, the construction schedule, and the proximity of other construction and demolition projects.

Demolition and construction would occur during implementation of the Master Plan Buildout Program. It is expected that there will be demolition of the 8,000-square-foot Foundation building. The Master Plan build out would also involve demolition of 21,120 sf of medical office buildings. It is anticipated that grading will need to be undertaken prior to the construction of new on-site buildings as part of the Master Plan Buildout Program.

The ARB URBEMIS2007 model was used to calculate the construction emissions, which breaks the entire construction process into seven phases, as shown in Table K. It is anticipated that nine new structures will be constructed on the existing 30-acre hospital campus over a 15-year period as described in Tables B and C. Phasing is intended to be flexible to respond to hospital and outpatient demands in the future. Additionally, the 8,000 sf Foundation building and the 80,000 sf Foundation and Administrative Office Building will be demolished.

Table K: Peak-Day Construction Emissions by Phase

Construction Phase	Pollutant Emissions (pounds/day)					
	CO	ROC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Demolition	6.9	1.5	11	0.0035	2.5	1.1
Mass Grading	36	7.4	82	0.060	79	19
Fine Grading	15	3.4	28	0.0013	77	17
Trenching	0	0.040	0.074	0	0	0
Paving	15	4.8	25	0.0083	2.0	1.8
Building	41	5.3	24	0.034	1.7	1.5
Coating	0.86	66	0.052	0.0010	0.0071	0.0038
SCAQMD Threshold	**550**	**75**	**100**	**150**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Significance Threshold	**1,046**	**--**	**319**	**--**	**12**	**6**
Exceed Significance?	**No**	**--**	**No**	**--**	**Yes**	**Yes**

Source: LSA 2008

The details of the construction schedule are not known. Using a typical schedule to characterize the construction of any portion of the Master Plan, Table K shows that none of the daily construction emissions thresholds will be exceeded. These emissions assume all standard construction control measures will be implemented, such as SCAQMD Rule 403 for dust control. Refer to Appendix A for details. It is also assumed that the construction phases do not overlap.

Localized Significance Analysis. Table K also compares the construction-related emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ to the LSTs for the Santa Clarita Valley at distances of 25 m. The emissions rates for the proposed construction activities are less than significant for CO and NO_X, however PM_{10}, and $PM_{2.5}$ exceed their thresholds during the grading phases. Therefore, even with all feasible mitigation measures implemented, the construction of this project will result in significant short-term localized air quality impacts potentially resulting in short-term exceedances of the PM_{10} and $PM_{2.5}$ AAQS at nearby residences.

Long-Term Project-Related Emissions Impacts. Long-term air emission impacts are those associated with stationary sources and mobile sources related to any change with respect to the proposed project. There will be stationary source emissions from the consumption of natural gas and electricity and mobile source emissions from the vehicles operating due to the project. Based on the traffic study prepared for this project (AFA, October 2007), the proposed land uses will result in an increase of 7,571 daily trips. Using the ARB model URBEMIS2007, emissions associated with these proposed land uses were calculated and are included in Table L. The model output files are included in Appendix B.

Table L: Long-Term Operational Emissions Increase

Source	Pollutant Emissions (lbs/day)					
	CO	**ROC**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Project Land Uses						
Medical Offices	310	28	42	0.56	91	18
Hospital	110	9.5	14	0.19	30	5.9
Total Project Emissions	420	38	56	0.75	120	24
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Significant?	**No**	**No**	**Yes**	**No**	**No**	**No**

Source: LSA Associates, Inc., April 2008.

Table L shows that the increase in emissions of NO_X due to project implementation would be higher than the SCAQMD daily emissions threshold. This is a significant regional air quality impact.

Despite great progress in air quality improvement, approximately 146 million people nationwide lived in counties with pollution levels above the NAAQS in 2002. Out of the 230 nonattainment areas identified during the 1990 Clean Air Act Amendment designation process, 124 areas remain as nonattainment today. In these nonattainment areas, however, the severity of air pollution episodes has decreased. Air quality in the South Coast Air Basin in the past 20 years has improved steadily and dramatically, even with the tremendous increase in population, vehicles, and other sources.

As shown in Table G, long-term exposure to elevated levels of criteria pollutants could result in potential health effects. However, as stated in the Thresholds of Significance, emissions thresholds established by the air district are used to manage total regional emissions within an air basin based on the air basin attainment status for criteria pollutants. These emissions thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations that may affect or delay the projected attainment target year for certain criteria pollutants.

Due to the conservative nature of the thresholds and the basinwide context of an individual project's emissions, there is no direct correlation of a single project to localized health effects. One individual project having emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This is especially true when the criteria pollutant exceeding a threshold is one with regional effects, such as an ozone precursor like NO_X.

Localized Significance Analysis

Table M shows the calculated emissions for the proposed operational activities compared with the appropriate localized significance thresholds. The localized significance analysis only includes on-site sources; however, the URBEMIS2007 model outputs do not separate on-site and off-site emissions

Table M: Summary of Operational Localized Significance

	Emission Rates (lbs/day)			
	CO	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project	13	3.3	2.4	0.5
Localized Significance Threshold	**1,046**	**319**	**3**	**2**
Exceed Significance?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., April 2008
lbs/day = pounds per day
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

from mobile sources. For a worst-case scenario assessment, the emissions shown in Table M include all on-site stationary sources and 2 percent of the mobile sources, which is an estimate of the amount of project-related vehicle traffic that will occur on site. Considering the average trip length included in the URBEMIS2007 model ranging from 7.4 to 15.4 miles, and a typical onsite travel distance of less than 500 feet (0.6 to 1.3 percent), the 2 percent assumption is conservative.

Table M shows that all operational emission rates are below the LST thresholds at 25 m. Therefore, the proposed operational activity will not cause any localized significant air quality impacts.

Based on the above discussion, the potential for an individual project to significantly deteriorate regional air quality or contribute to a significant health risk is small, even if the emissions thresholds are exceeded by the project. Due to the overall improvement trend on air quality in the air basin, it is unlikely that the regional air quality or health risk would worsen from the current condition due to emissions from an individual project.

Long-Term Microscale (CO Hot Spot) Analysis. The intersection vehicle turn volumes included in the traffic study reports (AFA, October 2007) were used with the Caltrans CALINE4 model to evaluate the local CO concentrations at intersections most affected by project traffic. Ten intersections that either have the highest turn volumes or worst level of service (LOS) in the project vicinity most affected by the project traffic were selected for the CO hot spot analysis. Table N lists the CO concentrations for these intersections under the existing (2007) conditions. Table O lists the CO concentrations in the interim year under the with and without project scenarios. It should be pointed out that, due to technological improvements, emissions factors (for vehicle exhaust) for future years would decrease. In addition, background concentrations in future years are anticipated to continue to decrease as the concerted effort to improve regional air quality progresses. Therefore, CO concentrations in the future years would generally be lower than existing conditions or more recent years in the future. It is anticipated that after the Master Plan Buildout Program is implemented, CO concentrations at similar locations would be lower, even with higher projected traffic volumes.

The proposed project would contribute to increased CO concentrations at intersections in the project vicinity. As shown in Table O, none of the 10 intersections analyzed would have a one-hour or eight-hour CO concentration exceeding State standards of 20 and 9.0 ppm, respectively, under the interim year with and without project conditions.

Table N: Existing CO Concentrations[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr	8-Hr
Rockwell Canyon and McBean	14	4.1	2.7	No	No
	17	3.9	2.5	No	No
	14	3.8	2.5	No	No
	14	3.8	2.5	No	No
McBean and Valencia	24	4.9	3.2	No	No
	22	4.7	3.1	No	No
	22	4.7	3.1	No	No
	24	4.6	3.0	No	No
McBean and Magic Mountain	19	5.2	3.4	No	No
	21	5.2	3.4	No	No
	22	4.9	3.2	No	No
	24	4.8	3.2	No	No
Orchard Village Valley and Wiley Canyon	15	4.1	2.7	No	No
	14	4.0	2.6	No	No
	14	4.0	2.6	No	No
	15	3.9	2.5	No	No
Orchard Village Valley and McBean	8	4.8	3.2	No	No
	8	4.6	3.0	No	No
	8	4.6	3.0	No	No
	15	4.5	3.0	No	No
Wiley Canyon and Lyons	17	4.1	2.7	No	No
	15	4.0	2.6	No	No
	15	4.0	2.6	No	No
	21	4.0	2.6	No	No
Tournament and Wiley Canyon	10	3.0	1.9	No	No
	8	3.0	1.9	No	No
	14	3.0	1.9	No	No
	8	2.9	1.8	No	No
Orchard Village Valley and Lyons	15	3.8	2.5	No	No
	15	3.8	2.5	No	No
	17	3.7	2.4	No	No
	21	3.7	2.4	No	No
Newhall and Lyons	15	3.9	2.5	No	No
	14	3.7	2.4	No	No
	17	3.6	2.3	No	No
	14	3.5	2.3	No	No
Valencia and Magic Mountain	16	4.3	2.8	No	No
	17	4.2	2.7	No	No
	17	4.2	2.7	No	No
	17	4.2	2.7	No	No

Source: LSA Associates, Inc., April 2008.

1 Includes ambient one-hour concentration of 2.0 ppm and ambient eight-hour concentration of 1.2 ppm. Measured at the 22224 Placerita Canyon Rd., Santa Clarita, CA, AQ Station (Los Angeles County).

Table O: Interim Year CO Concentrations without and with Project[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project One-Hour CO Concentration (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
					1-Hr	8-Hr
Rockwell Canyon and McBean	14 / 14	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	17 / 17	0.1 / 0.1	3.0 / 3.1	1.9 / 2.0	No	No
	14 / 14	0.1 / 0.1	2.9 / 3.0	1.8 / 1.9	No	No
	14 / 14	0.0 / 0.0	2.9 / 2.9	1.8 / 1.8	No	No
McBean and Valencia	22 / 22	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
	22 / 22	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
	24 / 24	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
	24 / 24	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
McBean and Magic Mountain	19 / 19	0.1 / 0.0	3.8 / 3.9	2.5 / 2.5	No	No
	21 / 21	0.0 / 0.0	3.8 / 3.8	2.5 / 2.5	No	No
	21 / 21	0.0 / 0.0	3.7 / 3.7	2.4 / 2.4	No	No
	19 / 19	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
Orchard Village Valley and Wiley Canyon	14 / 14	0.1 / 0.0	3.1 / 3.2	2.0 / 2.0	No	No
	15 / 15	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	14 / 14	0.0 / 0.0	3.0 / 3.0	1.9 / 1.9	No	No
	17 / 14	0.1 / 0.1	2.9 / 3.0	1.8 / 1.9	No	No
Orchard Village Valley and McBean	8 / 8	0.0 / 0.0	3.4 / 3.4	2.2 / 2.2	No	No
	16 / 8	0.1 / 0.1	3.3 / 3.4	2.1 / 2.2	No	No
	8 / 16	0.0 / 0.0	3.3 / 3.3	2.1 / 2.1	No	No
	15 / 8	0.1 / 0.1	3.2 / 3.3	2.0 / 2.1	No	No
Wiley Canyon and Lyons	17 / 17	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	15 / 15	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	16 / 15	0.1 / 0.1	3.0 / 3.1	1.9 / 2.0	No	No
	15 / 16	0.0 / 0.0	3.0 / 3.0	1.9 / 1.9	No	No
Tournament and Wiley Canyon	8 / 8	0.0 / 0.0	2.6 / 2.6	1.6 / 1.6	No	No
	10 / 10	0.0 / 0.0	2.6 / 2.6	1.6 / 1.6	No	No
	10 / 10	0.0 / 0.0	2.6 / 2.6	1.6 / 1.6	No	No
	8 / 8	0.0 / 0.0	2.6 / 2.6	1.6 / 1.6	No	No
Orchard Village Valley and Lyons	15 / 15	0.0 / 0.0	3.2 / 3.2	2.0 / 2.0	No	No
	15 / 15	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	17 / 17	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	17 / 17	0.0 / 0.0	3.0 / 3.0	1.9 / 1.9	No	No
Newhall and Lyons	15 / 15	0.0 / 0.0	3.1 / 3.1	2.0 / 2.0	No	No
	17 / 17	0.0 / 0.0	3.0 / 3.0	1.9 / 1.9	No	No
	14 / 14	0.0 / 0.0	2.9 / 2.9	1.8 / 1.8	No	No
	14 / 14	0.1 / 0.0	2.8 / 2.9	1.8 / 1.8	No	No
Valencia and Magic Mountain	17 / 17	0.0 / 0.0	3.6 / 3.6	2.3 / 2.3	No	No
	16 / 16	0.0 / 0.0	3.5 / 3.5	2.3 / 2.3	No	No
	15 / 15	0.0 / 0.0	3.4 / 3.4	2.2 / 2.2	No	No
	17 / 17	0.0 / 0.0	3.3 / 3.3	2.1 / 2.1	No	No

Source: LSA Associates, Inc., April 2008.

[1] Includes ambient one-hour concentration of 2.0 ppm and ambient eight-hour concentration of 1.2 ppm. Measured at the 22224 Placerita Canyon Rd., Santa Clarita, CA, AQ Station (Los Angeles County).

The project-related increase in CO concentrations at all ten intersections would be 0.1 ppm or less for the one-hour and eight-hour periods. Since no federal or State standards would be exceeded, no CO hot spot would occur. Therefore, no air pollution control measures are necessary or recommended for CO emissions.

Cumulative Impacts. The traffic study included vehicular trips from all present and future projects in the project vicinity. Therefore, CO hot spot concentrations calculated at these intersections include the cumulative traffic effect. Based on Table O, no significant cumulative CO impacts would occur.

Construction of the project would contribute cumulatively to the local and regional air pollutants together with other projects in the City that are under construction. Emissions associated with operations of the proposed project would contribute to long-term regional air pollutants. However, net increase in criteria pollutants emissions would not exceed the SCAQMD emission thresholds. Therefore, implementation of the proposed project would not contribute to significant cumulative air quality impacts.

Greenhouse Gas Emissions. The project will generate emissions of GHGs primarily in the form of vehicle exhaust and in the consumption of electricity and natural gas for heating. The emissions from vehicle exhaust are controlled by the State and federal governments and are outside the control of this project. Emissions from building heating systems will be minimized by compliance with State Title 24 regulations for building energy efficiency. Emissions from electricity production will occur at nearby power plants.

Evaluation of any potential global warming effects resulting from the project, including modeling and gauging the impacts associated with an increase of trips or generation of new trips and the effect on GHG or global warming, would be entirely speculative since no modeling protocol or significance criteria has been established. Table P shows that the proposed land uses generate up to 30,600 tons per year of carbon dioxide equivalent (CO_2e).[1]

Table P: Project Greenhouse Gas Emissions

Emission Source	Emissions (tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Vehicles	25,000	9.7	2.7	26,000
Electricity Production	3,200	0.035	0.019	3,200
Natural Gas Combustion	1400	0.027	0.026	1,400
Total Annual Emissions	**29,600**	**9.8**	**2.7**	**30,600**

Source: LSA Associates, Inc. April 2008.
CH_4 = methane　　CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent　　N_2O = nitrous oxide

1 See Appendix D.

Due to the global nature of this phenomenon and the scale of the emissions, total emissions are expressed in units of teragrams (a trillion [10^{12}] grams or 1 million metric tons [tonnes]) per year (Tg/year). This is the standard metric unit used worldwide. The total annual emissions of 30,600 tons/year of CO_2e is approximately 0.028 million metric tonnes of CO_2e. As a comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 million metric tonnes of CO_2e per year and approximately 496.95 million metric tonnes of CO_2e per year for the entire State.

As described above, project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Consequently, it is speculative to determine how project-related GHG emissions would contribute to global climate change and how global climate change may impact California. Therefore, project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact. As stated previously, project-related CO_2 emissions and their contribution to global climate change impacts in the State of California are less than significant and less than cumulatively considerable because: (1) the project's impacts alone would not cause or significantly contribute to global climate change, and (2) the net increase in air pollutant emissions would not exceed the SCAQMD thresholds for criteria pollutants.

Recommended Standard Project Measures. Because project-related construction emissions would exceed the SCAQMD thresholds for criteria pollutants, the following measures are recommended to minimize air pollutant emissions. Compliance with the fugitive dust palliative SCAQMD Rules 402 and 403 have been utilized in the impact analyses to reduce potential PM_{10} emissions to within SCAQMD thresholds.

- During construction, the contractor shall be responsible for ensuring that all measures listed in Table Q are implemented. To achieve the particulate control efficiencies shown, it is assumed that finished surfaces will be stabilized with water and/or dust palliatives and isolated from traffic flows to prevent emissions of fugitive dust from these areas. In addition, the following water application rates are assumed:
  - Roads traveled by autos, rock trucks, water trucks, fuel trucks, and maintenance trucks: up to twice per hour
  - Roads traveled by scrapers and loaders; active excavation area: up to three times per hour
  - Finish grading area: up to once every two hours

Table Q: Standard Measures for Construction-Related Emissions

Construction Vehicle/Equipment Operation
• Configure construction parking to minimize traffic interference.
• Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person).
• Provide on-site food service for construction workers.
• Prohibit truck idling in excess of 10 minutes.
• Apply four to six degree injection timing retard to diesel IC engines, whenever feasible.
• Use reformulated low-sulfur diesel fuel in all equipment, whenever feasible.

• Use catalytic converters on all gasoline-powered equipment. • Minimize concurrent use of equipment through equipment phasing. • Use low NO_X engines, alternative fuels, and electrification, whenever feasible. • Substitute electric and gasoline-powered equipment for diesel-powered equipment, whenever feasible. • Turn off engines when not in use. • Wash truck wheels before the trucks leave the construction site. • When operating on site, do not leave trucks idling for periods in excess of 10 minutes. • Operate clean fuel van(s), preferably vans that run on compressed natural gas or propane, to transport construction workers to and from the construction site. • Provide documentation to the City prior to beginning construction, demonstrating that the project proponents will comply with all SCAQMD regulations including 402, 403, 1113, and 1403. • Suspend use of all construction equipment operations during second stage smog alerts.
Grading
• Apply nontoxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more). • Enclose, cover, water twice daily, or apply nontoxic soil binders, according to manufacturers' specifications, to exposed piles (i.e., gravel, sand, dirt) with 5 percent or greater silt content. • Water active sites at least twice daily. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph. • Cover all trucks hauling dirt, sand, soil, or other loose materials on site or maintain at least two ft of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CDC Section 23114. • Cover all trucks hauling these materials off site.
Paved Roads
• Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved road (water sweepers with reclaimed water are recommended). • Sweep public streets at the conclusion of construction work. • Install adequate storm water control systems to prevent mud deposition onto paved areas.
Unpaved Roads
• Apply water three times daily, or nontoxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces.

Source: SCAQMD Rules 402 and 403; LSA, 2004.

- All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. The contractor will ensure that all construction equipment is being properly serviced and maintained.
- The construction contractor shall utilize, as much as possible, precoated/natural-colored building materials, water-based or low-VOC coating, and coating transfer or spray equipment with high transfer efficiency, such as high-volume, low-pressure (HVLP) spray method, or manual coatings application such as a paintbrush, hand roller, trowel, spatula, dauber, rag, or sponge.
- Project design will incorporate energy-saving features throughout the project, including low-emission water heaters, central water heating systems, and built-in energy-efficient appliances.
- Parking areas will be planted with trees to ensure shading and prevent heat buildup.

- The facility will be designed to use low-emitting paints and solvents throughout.

6.0 REFERENCES

California Air Resources Board. Web site: www.arb.ca.gov.

California Department of Transportation. Transportation Project-Level Carbon Monoxide Protocol. 1997.

California Department of Transportation. *Air Quality Technical Analysis Notes.* June 1988.

Austin-Foust Associates, Inc. Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis, October 2007.

South Coast Air Quality Management District. Air Quality Management Plan. 2007.

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

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

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Western Regional Climate Center. Web site: www.wrcc.dri.edu.

APPENDIX A

CONSTRUCTION WORKSHEETS

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\RBF435\Air & Noise Modeling\Urbemis MstrPlanBO-2017-const.urb924

Project Name: Henry Mayo Hospital Construction

Project Location: South Coast AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2008 TOTALS (lbs/day unmitigated)	7.43	82.42	40.53	0.06	75.42	3.78	79.20	15.78	3.48	19.25	8,696.80
2008 TOTALS (lbs/day mitigated)	7.43	82.42	40.53	0.06	75.42	3.78	79.20	15.78	3.48	19.25	8,696.80
2009 TOTALS (lbs/day unmitigated)	65.57	22.63	38.22	0.03	0.15	1.51	1.66	0.05	1.38	1.44	4,898.80
2009 TOTALS (lbs/day mitigated)	65.57	22.63	38.22	0.03	0.15	1.51	1.66	0.05	1.38	1.44	4,898.80

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 3/3/2008-3/21/2008 Active Days: 15	1.51	10.78	6.91	0.00	1.69	0.77	2.46	0.35	0.71	1.06	1,060.25
Demolition 03/03/2008-03/21/2008	1.51	10.78	6.91	0.00	1.69	0.77	2.46	0.35	0.71	1.06	1,060.25
Fugitive Dust	0.00	0.00	0.00	0.00	1.68	0.00	1.68	0.35	0.00	0.35	0.00
Demo Off Road Diesel	1.31	8.68	4.91	0.00	0.00	0.68	0.68	0.00	0.62	0.62	700.30
Demo On Road Diesel	0.15	2.02	0.79	0.00	0.01	0.09	0.10	0.00	0.08	0.08	235.47
Demo Worker Trips	0.04	0.07	1.21	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.49
Time Slice 3/24/2008-6/20/2008 Active Days: 65	7.43	**82.42**	36.01	**0.06**	**75.42**	**3.78**	**79.20**	**15.78**	**3.48**	**19.25**	**8,696.80**
Mass Grading 03/24/2008-06/20/2008	7.43	82.42	36.01	0.06	75.42	3.78	79.20	15.78	3.48	19.25	8,696.80
Mass Grading Dust	0.00	0.00	0.00	0.00	75.20	0.00	75.20	15.70	0.00	15.70	0.00
Mass Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30	2,247.32
Mass Grading On Road Diesel	4.07	54.34	21.24	0.06	0.21	2.37	2.58	0.07	2.18	2.25	6,325.00
Mass Grading Worker Trips	0.04	0.07	1.21	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.49
Time Slice 6/23/2008-8/1/2008 Active Days: 30	3.35	28.07	14.77	0.00	75.21	1.41	76.62	15.71	1.30	17.01	2,371.80
Fine Grading 06/23/2008-08/01/2008	3.35	28.07	14.77	0.00	75.21	1.41	76.62	15.71	1.30	17.01	2,371.80

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Fine Grading Dust	0.00	0.00	0.00	0.00	75.20	0.00	75.20	15.70	0.00	15.70	0.00
Fine Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.07	1.21	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.49
Time Slice 8/4/2008-8/15/2008 Active Days: 10	2.37	20.19	9.68	0.00	0.01	1.00	1.01	0.00	0.92	0.92	1,839.12
Trenching 08/04/2008-08/15/2008	2.37	20.19	9.68	0.00	0.01	1.00	1.01	0.00	0.92	0.92	1,839.12
Trenching Off Road Diesel	2.33	20.12	8.46	0.00	0.00	1.00	1.00	0.00	0.92	0.92	1,714.64
Trenching Worker Trips	0.04	0.07	1.21	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.49
Time Slice 8/18/2008-8/29/2008 Active Days: 10	4.82	25.08	15.17	0.01	0.03	1.95	1.98	0.01	1.79	1.81	2,270.60
Asphalt 08/18/2008-08/29/2008	4.82	25.08	15.17	0.01	0.03	1.95	1.98	0.01	1.79	1.81	2,270.60
Paving Off-Gas	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.37	20.00	10.53	0.00	0.00	1.73	1.73	0.00	1.59	1.59	1,418.44
Paving On Road Diesel	0.37	4.92	1.92	0.01	0.02	0.21	0.23	0.01	0.20	0.20	572.06
Paving Worker Trips	0.09	0.17	2.73	0.00	0.01	0.01	0.02	0.00	0.01	0.01	280.09
Time Slice 9/1/2008-12/31/2008 Active Days: 88	5.27	23.89	**40.53**	0.03	0.15	1.58	1.73	0.05	1.45	1.50	4,899.92
Building 09/01/2008-04/24/2009	5.27	23.89	40.53	0.03	0.15	1.58	1.73	0.05	1.45	1.50	4,899.92
Building Off Road Diesel	4.07	18.22	11.80	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,621.20
Building Vendor Trips	0.36	4.12	3.33	0.01	0.02	0.18	0.20	0.01	0.17	0.17	670.61
Building Worker Trips	0.84	1.55	25.40	0.03	0.12	0.07	0.19	0.04	0.06	0.10	2,608.12
Time Slice 1/1/2009-4/24/2009 Active Days: 82	4.96	22.63	38.22	0.03	0.15	1.51	1.66	0.05	1.38	1.44	4,898.80
Building 09/01/2008-04/24/2009	4.96	22.63	38.22	0.03	0.15	1.51	1.66	0.05	1.38	1.44	4,898.80
Building Off Road Diesel	3.87	17.35	11.50	0.00	0.00	1.28	1.28	0.00	1.17	1.17	1,621.20
Building Vendor Trips	0.33	3.87	3.11	0.01	0.02	0.16	0.19	0.01	0.15	0.16	670.65
Building Worker Trips	0.76	1.42	23.61	0.03	0.12	0.07	0.19	0.04	0.06	0.10	2,606.95
Time Slice 4/27/2009-9/22/2009 Active Days: 107	65.57	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	95.17
Coating 04/27/2009-09/22/2009	65.57	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	95.17
Architectural Coating	65.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.05	0.86	0.00	0.00	0.00	0.01	0.00	0.00	0.00	95.17

Construction Related Mitigation Measures

APPENDIX B

URBEMIS2007 MODEL OUTPUTS

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\RBF435\Air & Noise Modeling\Urbemis Existing-2017.urb924

Project Name: Henry Mayo Existing

Project Location: South Coast AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.97	2.89	5.49	0.00	0.02	0.02	3,431.14

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	47.50	66.94	617.28	1.10	181.07	35.16	108,223.87

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	50.47	69.83	622.77	1.10	181.09	35.18	111,655.01

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.21	2.85	2.40	0.00	0.01	0.01	3,425.52
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	2.51						
TOTALS (lbs/day, unmitigated)	2.97	2.89	5.49	0.00	0.02	0.02	3,431.14

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Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Medical office building	28.99	41.47	380.10	0.68	111.98	21.74	66,870.82
Hospital	18.51	25.47	237.18	0.42	69.09	13.42	41,353.05
TOTALS (lbs/day, unmitigated)	47.50	66.94	617.28	1.10	181.07	35.16	108,223.87

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		36.13	1000 sq ft	196.08	7,084.37	64,860.95
Hospital		17.57	1000 sq ft	232.11	4,078.17	40,017.07
					11,162.54	104,878.02

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.9	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	44.8	55.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\RBF435\Air & Noise Modeling\Urbemis Existing-2017.urb924

Project Name: Henry Mayo Existing

Project Location: South Coast AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.72	2.85	2.40	0.00	0.01	0.01	3,425.52

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	52.86	80.38	581.37	0.92	181.07	35.16	97,858.46

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	55.58	83.23	583.77	0.92	181.08	35.17	101,283.98

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.21	2.85	2.40	0.00	0.01	0.01	3,425.52
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	2.51						
TOTALS (lbs/day, unmitigated)	2.72	2.85	2.40	0.00	0.01	0.01	3,425.52

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Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Medical office building	32.51	49.79	358.72	0.57	111.98	21.74	60,460.42
Hospital	20.35	30.59	222.65	0.35	69.09	13.42	37,398.04
TOTALS (lbs/day, unmitigated)	52.86	80.38	581.37	0.92	181.07	35.16	97,858.46

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		36.13	1000 sq ft	196.08	7,084.37	64,860.95
Hospital		17.57	1000 sq ft	232.11	4,078.17	40,017.07
					11,162.54	104,878.02

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.9	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	44.8	55.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\RBF435\Air & Noise Modeling\Urbemis MstrPlanBO-2017.urb924

Project Name: Henry Mayo Hospital

Project Location: South Coast AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.33	2.22	4.92	0.00	0.01	0.01	2,624.50

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	32.14	45.02	414.25	0.75	121.70	23.63	72,716.28

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	34.47	47.24	419.17	0.75	121.71	23.64	75,340.78

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.18	1.83	0.00	0.00	0.00	2,618.88
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	1.92						
TOTALS (lbs/day, unmitigated)	2.33	2.22	4.92	0.00	0.01	0.01	2,624.50

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Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Medical office building	23.87	33.84	310.11	0.56	91.36	17.74	54,558.60
Hospital	8.27	11.18	104.14	0.19	30.34	5.89	18,157.68
TOTALS (lbs/day, unmitigated)	32.14	45.02	414.25	0.75	121.70	23.63	72,716.28

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		28.90	1000 sq ft	200.00	5,780.00	52,918.79
Hospital		14.06	1000 sq ft	127.36	1,790.68	17,571.06
					7,570.68	70,489.85

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.9	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	44.8	55.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\RBF435\Air & Noise Modeling\Urbemis MstrPlanBO-2017.urb924

Project Name: Henry Mayo Hospital

Project Location: South Coast AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.08	2.18	1.83	0.00	0.00	0.00	2,618.88

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	35.63	54.05	390.43	0.61	121.70	23.63	65,749.56

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	37.71	56.23	392.26	0.61	121.70	23.63	68,368.44

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.18	1.83	0.00	0.00	0.00	2,618.88
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.92						
TOTALS (lbs/day, unmitigated)	2.08	2.18	1.83	0.00	0.00	0.00	2,618.88

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Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Medical office building	26.63	40.62	292.67	0.46	91.36	17.74	49,328.48
Hospital	9.00	13.43	97.76	0.15	30.34	5.89	16,421.08
TOTALS (lbs/day, unmitigated)	35.63	54.05	390.43	0.61	121.70	23.63	65,749.56

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2017 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		28.90	1000 sq ft	200.00	5,780.00	52,918.79
Hospital		14.06	1000 sq ft	127.36	1,790.68	17,571.06
					7,570.68	70,489.85

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.9	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	44.8	55.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5

LST Worksheet
Operational Emissions

LST				
Emission Sources	**CO**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile sources-regional	414	54	122	24
Onsite percentage = 2%				
Mobile sources-onsite	8.3	1.1	2.4	0.47
Stationary sources	4.9	2.2	0.010	0.010
Total onsite emissions	**13**	**3.3**	**2.4**	**0.48**

APPENDIX C

CALINE4 MODEL OUTPUTS

HENRY MAYO HOSPITAL

AIR QUALITY REGIONAL EMISSIONS

URBEMIS 2002 MODEL PRINTOUT

EXISTING BASELINE CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
     U=    .5 M/S            Z0= 100. CM            ALT=   373. (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. Rockwell NBA	7	-150	7	0	AG	276	7.1	.0	10.0
B. Rockwell NBD	7	0	7	150	AG	587	4.6	.0	10.0
C. Rockwell NBL	5	-150	0	0	AG	239	8.3	.0	10.0
D. Rockwell SBA	-7	150	-7	0	AG	451	8.3	.0	10.0
E. Rockwell SBD	-7	0	-7	-150	AG	531	7.8	.0	10.0
F. Rockwell SBL	-5	150	0	0	AG	97	7.8	.0	10.0
G. McBean EBA	-150	-9	0	-9	AG	1403	5.8	.0	13.5
H. McBean EBD	0	-9	150	-9	AG	1383	3.8	.0	11.8
I. McBean EBL	-150	-5	0	0	AG	356	8.4	.0	10.0
J. McBean WBA	150	9	0	9	AG	1018	5.7	.0	13.5
K. McBean WBD	0	9	-150	9	AG	1454	3.8	.0	11.8
L. McBean WBL	150	5	0	0	AG	115	7.7	.0	10.0
M. Rockwel NBAX	7	-750	7	-150	AG	515	3.8	.0	10.0
N. Rockwel NBDX	7	150	7	750	AG	587	3.8	.0	10.0
O. Rockwel SBAX	-7	750	-7	150	AG	548	3.8	.0	10.0
P. Rockwel SBDX	-7	-150	-7	-750	AG	531	3.8	.0	10.0
Q. McBean EBAX	-750	-9	-150	-9	AG	1759	3.6	.0	13.5
R. McBean EBDX	150	-9	750	-9	AG	1383	3.6	.0	11.8
S. McBean WBAX	750	9	150	9	AG	1133	3.6	.0	13.5
T. McBean WBDX	-150	9	-750	9	AG	1454	3.6	.0	11.8

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
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	278.	2.1	.1	.0	.1	.0	.2	.0	.9	.1
2. NW	171.	1.8	.1	.0	.2	.1	.5	.0	.3	.0
3. SW	8.	1.8	.0	.1	.0	.5	.2	.0	.5	.0
4. NE	260.	1.8	.0	.2	.0	.1	.0	.0	.3	.0
5. ES mdblk	277.	1.5	.0	.0	.0	.0	.0	.0	.1	.7
6. WN mdblk	100.	1.6	.0	.0	.0	.0	.0	.0	.3	.1
7. WS mdblk	81.	1.9	.0	.0	.0	.0	.0	.0	1.1	.0
8. EN mdblk	262.	1.6	.0	.0	.0	.0	.0	.0	.2	.1
9. SE mdblk	351.	1.2	.3	.0	.3	.0	.2	.0	.0	.0
10. NW mdblk	173.	1.2	.0	.0	.0	.6	.0	.1	.0	.0
11. SW mdblk	7.	1.3	.0	.0	.1	.0	.6	.0	.0	.0
12. NE mdblk	188.	1.1	.0	.4	.0	.2	.1	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.2	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.1	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.2	.1	.6	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.2	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.8	.0	.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	.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	.8	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.8
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.6	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.4	.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	.4	.1	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. McBean NBA	16	-150	16	0	AG	1575	7.0	.0	20.5
B. McBean NBD	16	0	16	150	AG	1889	4.5	.0	13.5
C. McBean NBL	9	-150	0	0	AG	128	7.7	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	1871	7.7	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	1700	4.1	.0	13.5
F. McBean SBL	-9	150	0	0	AG	189	7.7	.0	10.0
G. Valencia EBA	-150	-14	0	-14	AG	1355	6.5	.0	17.0
H. Valencia EBD	0	-14	150	-14	AG	1960	4.5	.0	13.5
I. Valencia EBL	-150	-9	0	0	AG	668	8.4	.0	10.0
J. Valencia WBA	150	14	0	14	AG	1169	6.3	.0	17.0
K. Valencia WBD	0	14	-150	14	AG	1852	4.5	.0	13.5
L. Valencia WBL	150	9	0	0	AG	446	8.3	.0	10.0
M. McBean NBAX	16	-750	16	-150	AG	1703	3.6	.0	20.5
N. McBean NBDX	16	150	16	750	AG	1889	3.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	2060	3.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	1700	3.6	.0	13.5
Q. Valenci EBAX	-750	-14	-150	-14	AG	2023	3.6	.0	17.0
R. Valenci EBDX	150	-14	750	-14	AG	1960	3.6	.0	13.5
S. Valenci WBAX	750	14	150	14	AG	1615	3.6	.0	17.0
T. Valenci WBDX	-150	14	-750	14	AG	1852	3.6	.0	13.5

JOB: Henry Mayo Hospital General Plan
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	28	-22	1.8
2. NW	-28	22	1.8
3. SW	-24	-24	1.8
4. NE	24	24	1.8
5. ES mdblk	150	-22	1.8
6. WN mdblk	-150	22	1.8
7. WS mdblk	-150	-24	1.8
8. EN mdblk	150	24	1.8
9. SE mdblk	28	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-24	-150	1.8
12. NE mdblk	24	150	1.8
13. ES blk	600	-22	1.8
14. WN blk	-600	22	1.8
15. WS blk	-600	-24	1.8
16. EN blk	600	24	1.8
17. SE blk	28	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-24	-600	1.8
20. NE blk	24	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
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	280.	2.7	.6	.0	.0	.0	.2	.0	.7	.5
2. NW	100.	2.7	.0	.2	.0	.8	.0	.0	.0	.1
3. SW	7.	2.9	.0	.0	.0	1.2	.3	.0	.5	.0
4. NE	257.	2.6	.0	.5	.0	.4	.0	.0	.2	.0
5. ES mdblk	279.	2.2	.0	.0	.0	.1	.0	.0	.1	1.1
6. WN mdblk	99.	2.1	.0	.0	.0	.1	.0	.0	.0	.2
7. WS mdblk	79.	2.2	.0	.0	.0	.1	.0	.0	1.0	.0
8. EN mdblk	261.	2.1	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	350.	2.2	1.2	.0	.0	.3	.0	.0	.0	.0
10. NW mdblk	170.	2.5	.3	.0	.0	1.5	.0	.0	.0	.0
11. SW mdblk	8.	1.9	.0	.2	.0	.2	.9	.0	.0	.0
12. NE mdblk	189.	2.0	.1	1.1	.0	.0	.2	.0	.0	.0
13. ES blk	277.	1.6	.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.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	1.6	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.6	.5	.2	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.2	.0	.2	.0	.0	.2	.2	.0	.0	.0	.0	.0
4. NE	.3	.3	.6	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.1	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.2	.0	1.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.1	.9	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.1	.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	1.0	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.9
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.8	.0
17. SE blk	.0	.0	.0	.0	.8	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.9	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.9	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	1.0	.3	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. McBean NBA	14	-150	14	0	AG	2122	7.1	.0	17.0
B. McBean NBD	14	0	14	150	AG	2939	5.5	.0	13.5
C. McBean NBL	9	-150	0	0	AG	124	7.7	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	2046	6.1	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	2179	3.9	.0	17.0
F. McBean SBL	-9	150	0	0	AG	305	7.7	.0	10.0
G. Magic Mt EBA	-150	-12	0	-12	AG	785	7.9	.0	13.5
H. Magic Mt EBD	0	-12	150	-12	AG	1078	7.8	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	674	8.4	.0	10.0
J. Magic Mt WBA	150	12	0	12	AG	736	7.9	.0	13.5
K. Magic Mt WBD	0	12	-150	12	AG	858	6.3	.0	10.0
L. Magic Mt WBL	150	9	0	0	AG	262	7.7	.0	10.0
M. McBean NBAX	14	-750	14	-150	AG	2246	3.6	.0	17.0
N. McBean NBDX	14	150	14	750	AG	2939	3.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	2351	3.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	2179	3.6	.0	17.0
Q. Magic M EBAX	-750	-12	-150	-12	AG	1459	3.6	.0	13.5
R. Magic M EBDX	150	-12	750	-12	AG	1078	3.6	.0	10.0
S. Magic M WBAX	750	12	150	12	AG	998	3.6	.0	13.5
T. Magic M WBDX	-150	12	-750	12	AG	858	3.6	.0	10.0

JOB: Henry Mayo Hospital General Plan
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	24	-19	1.8
2. NW	-28	19	1.8
3. SW	-26	-21	1.8
4. NE	22	21	1.8
5. ES mdblk	150	-19	1.8
6. WN mdblk	-150	19	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	24	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-26	-150	1.8
12. NE mdblk	22	150	1.8
13. ES blk	600	-19	1.8
14. WN blk	-600	19	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	24	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-26	-600	1.8
20. NE blk	22	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
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	349.	3.2	.5	1.2	.0	.2	.0	.0	.0	.6
2. NW	101.	2.5	.0	.4	.0	.7	.0	.0	.0	.2
3. SW	9.	2.7	.0	.1	.0	1.0	.3	.1	.4	.0
4. NE	189.	3.2	1.3	.6	.0	.0	.0	.0	.0	.2
5. ES mdblk	278.	2.2	.1	.0	.0	.1	.0	.0	.0	1.2
6. WN mdblk	99.	1.9	.1	.0	.0	.0	.0	.0	.1	.2
7. WS mdblk	80.	2.1	.0	.1	.0	.1	.0	.0	.9	.0
8. EN mdblk	261.	1.9	.1	.0	.0	.0	.0	.0	.2	.1
9. SE mdblk	351.	2.8	1.7	.2	.0	.3	.0	.0	.0	.0
10. NW mdblk	169.	2.4	.3	.1	.0	1.3	.0	.1	.0	.0
11. SW mdblk	9.	2.1	.0	.3	.0	.2	1.0	.0	.0	.0
12. NE mdblk	190.	2.9	.1	1.9	.0	.1	.2	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	2.1	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

CONC/LINK (PPM)

RECEPTOR	*	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.2	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.4	.1	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	*	.2	.0	.2	.0	.0	.3	.1	.0	.0	.0	.0	.0
4. NE	*	.0	.4	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
5. ES mdblk	*	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	.8	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.2	.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	.6	.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	.8	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.5	.0
17. SE blk	*	.0	.0	.0	.0	1.0	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	1.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	1.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	1.3	.3	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	7	-150	7	0	AG	1027	7.0	.0	10.0
B. Orchard NBD	7	0	7	150	AG	1250	4.7	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	207	8.3	.0	10.0
D. Orchard SBA	-9	150	-9	0	AG	1182	7.0	.0	13.5
E. Orchard SBD	-9	0	-9	-150	AG	1188	4.4	.0	10.0
F. Orchard SBL	-5	150	0	0	AG	179	7.8	.0	10.0
G. Wiley Cy EBA	-150	-11	0	-11	AG	610	6.4	.0	10.0
H. Wiley Cy EBD	0	-11	150	-11	AG	842	4.2	.0	10.0
I. Wiley Cy EBL	-150	-9	0	0	AG	345	7.8	.0	10.0
J. Wiley Cy WBA	150	9	0	9	AG	379	6.1	.0	13.5
K. Wiley Cy WBD	0	9	-150	9	AG	825	4.2	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	176	7.8	.0	10.0
M. Orchard NBAX	7	-750	7	-150	AG	1234	3.8	.0	10.0
N. Orchard NBDX	7	150	7	750	AG	1250	3.8	.0	10.0
O. Orchard SBAX	-9	750	-9	150	AG	1361	3.8	.0	13.5
P. Orchard SBDX	-9	-150	-9	-750	AG	1188	3.8	.0	10.0
Q. Wiley C EBAX	-750	-11	-150	-11	AG	955	3.8	.0	10.0
R. Wiley C EBDX	150	-11	750	-11	AG	842	3.8	.0	10.0
S. Wiley C WBAX	750	9	150	9	AG	555	3.8	.0	13.5
T. Wiley C WBDX	-150	9	-750	9	AG	825	3.8	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
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	350.	2.0	.3	.6	.0	.4	.0	.1	.0	.2
2. NW	169.	1.9	.3	.0	.1	.3	.5	.0	.1	.0
3. SW	7.	2.1	.0	.2	.0	.9	.2	.1	.3	.0
4. NE	188.	1.9	.8	.2	.2	.0	.2	.0	.0	.1
5. ES mdblk	277.	1.2	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	1.4	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	1.1	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	2.0	1.0	.0	.2	.2	.2	.0	.0	.0
10. NW mdblk	172.	1.9	.2	.1	.0	1.1	.0	.1	.0	.0
11. SW mdblk	7.	1.6	.2	.1	.0	.1	.7	.0	.0	.0
12. NE mdblk	188.	1.7	.0	.8	.0	.3	.1	.0	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.3	.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	187.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.1	.0	.0	.0	.0	.0
2. NW	.1	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	.1	.0	.1	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	.0	.0	.0	.0	.7	.0	.0	.3	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.8	.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	.7	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	9	-150	9	0	AG	872	8.4	.0	11.8
B. Orchard NBD	9	0	9	150	AG	68	4.4	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	344	7.8	.0	10.0
D. Orchard SBA	-2	150	-2	0	AG	102	7.1	.0	10.0
E. Orchard SBD	-2	0	-2	-150	AG	1347	8.4	.0	10.0
F. Orchard SBL	-2	150	0	0	AG	74	7.8	.0	10.0
G. McBean EBA	-150	-9	0	-9	AG	1266	5.8	.0	13.5
H. McBean EBD	0	-9	150	-9	AG	1779	3.9	.0	11.8
I. McBean EBL	-150	-5	0	0	AG	25	7.7	.0	10.0
J. McBean WBA	150	12	0	12	AG	803	5.5	.0	13.5
K. McBean WBD	0	12	-150	12	AG	1170	3.8	.0	11.8
L. McBean WBL	150	9	0	0	AG	878	8.4	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	1216	3.8	.0	11.8
N. Orchard NBDX	9	150	9	750	AG	68	3.8	.0	10.0
O. Orchard SBAX	-2	750	-2	150	AG	176	3.8	.0	10.0
P. Orchard SBDX	-2	-150	-2	-750	AG	1347	3.8	.0	10.0
Q. McBean EBAX	-750	-9	-150	-9	AG	1291	3.6	.0	13.5
R. McBean EBDX	150	-9	750	-9	AG	1779	3.6	.0	11.8
S. McBean WBAX	750	12	150	12	AG	1681	3.6	.0	13.5
T. McBean WBDX	-150	12	-750	12	AG	1170	3.6	.0	11.8

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.4	.5	.0	.1	.0	.4	.0	.8	.2
2. NW	173.	2.6	.4	.0	.3	.0	1.1	.0	.2	.0
3. SW	77.	2.8	.3	.0	.2	.0	.8	.0	.0	.7
4. NE	188.	2.5	.8	.0	.2	.0	.6	.0	.0	.2
5. ES mdblk	278.	1.8	.0	.0	.0	.0	.0	.0	.0	.9
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.1	.2
7. WS mdblk	84.	1.8	.0	.0	.0	.0	.0	.0	.9	.1
8. EN mdblk	257.	1.9	.0	.0	.0	.0	.1	.0	.1	.2
9. SE mdblk	347.	2.2	1.0	.0	.3	.0	.6	.0	.0	.0
10. NW mdblk	177.	1.1	.2	.0	.0	.1	.2	.0	.0	.0
11. SW mdblk	12.	2.6	.5	.0	.2	.0	1.6	.0	.0	.0
12. NE mdblk	183.	1.1	.2	.0	.0	.0	.2	.0	.0	.0
13. ES blk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	262.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	182.	.4	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.2
2. NW	.0	.0	.3	.0	.2	.0	.0	.1	.0	.0	.0	.0
3. SW	.0	.2	.0	.4	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	.0	.3	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	.0	.0	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.6	.2	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	.0	.6	.0	.6	.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	.1	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.1	.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	.3	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.7
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.9	.0
17. SE blk	.0	.0	.0	.0	.7	.0	.0	.3	.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	.3	.0	.0	.8	.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: Henry Mayo Hospital General Plan
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Wiley Cy NBA	9	-150	9	0	AG	588	7.4	.0	13.5
B. Wiley Cy NBD	9	0	9	150	AG	945	6.6	.0	10.0
C. Wiley Cy NBL	5	-150	0	0	AG	152	7.8	.0	10.0
D. Wiley Cy SBA	-9	150	-9	0	AG	627	8.0	.0	13.5
E. Wiley Cy SBD	-9	0	-9	-150	AG	644	5.0	.0	10.0
F. Wiley Cy SBL	-5	150	0	0	AG	190	7.8	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1226	6.4	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1527	4.2	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	441	8.3	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1019	5.7	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1318	3.8	.0	11.8
L. Lyons WBL	150	5	0	0	AG	191	7.7	.0	10.0
M. Wiley C NBAX	9	-750	9	-150	AG	740	3.8	.0	13.5
N. Wiley C NBDX	9	150	9	750	AG	945	3.8	.0	10.0
O. Wiley C SBAX	-9	750	-9	150	AG	817	3.8	.0	13.5
P. Wiley C SBDX	-9	-150	-9	-750	AG	644	3.8	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	1667	3.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1527	3.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1210	3.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1318	3.6	.0	11.8

JOB: Henry Mayo Hospital General Plan
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.1	.3	.0	.0	.0	.1	.0	.8	.2
2. NW	98.	1.9	.0	.2	.0	.3	.0	.0	.0	.1
3. SW	8.	2.0	.0	.2	.0	.5	.1	.1	.5	.0
4. NE	257.	2.0	.0	.4	.0	.2	.0	.0	.3	.0
5. ES mdblk	278.	1.7	.0	.0	.0	.0	.0	.0	.0	.9
6. WN mdblk	99.	1.5	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	80.	2.0	.0	.0	.0	.0	.0	.0	1.0	.0
8. EN mdblk	262.	1.7	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	352.	1.4	.6	.0	.1	.1	.0	.0	.0	.0
10. NW mdblk	171.	1.5	.1	.2	.0	.7	.0	.1	.0	.0
11. SW mdblk	7.	1.3	.1	.2	.0	.0	.5	.0	.0	.0
12. NE mdblk	189.	1.6	.0	.9	.0	.2	.0	.0	.0	.0
13. ES blk	277.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.9	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.2	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.0	.6	.2	.1	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.1	.0	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.3	.2	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.8	.0	.1	.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	.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	.8	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.7
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.7	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.4	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	373. (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. Tourneme NBA	2	-150	2	0	AG	33	7.1	.0	10.0
B. Tourneme NBD	2	0	2	150	AG	315	5.0	.0	10.0
C. Tourneme NBL	2	-150	0	0	AG	14	7.8	.0	10.0
D. Tourneme SBA	-4	150	-4	0	AG	222	7.4	.0	10.0
E. Tourneme SBD	-4	0	-4	-150	AG	63	4.4	.0	10.0
F. Tourneme SBL	-2	150	0	0	AG	89	7.8	.0	10.0
G. Wiley Cy EBA	-150	-7	0	-7	AG	557	5.7	.0	10.0
H. Wiley Cy EBD	0	-7	150	-7	AG	656	4.0	.0	10.0
I. Wiley Cy EBL	-150	-5	0	0	AG	219	8.3	.0	10.0
J. Wiley Cy WBA	150	7	0	7	AG	496	5.7	.0	10.0
K. Wiley Cy WBD	0	7	-150	7	AG	629	4.0	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	33	7.8	.0	10.0
M. Tournem NBAX	2	-750	2	-150	AG	47	3.8	.0	10.0
N. Tournem NBDX	2	150	2	750	AG	315	3.8	.0	10.0
O. Tournem SBAX	-4	750	-4	150	AG	311	3.8	.0	10.0
P. Tournem SBDX	-4	-150	-4	-750	AG	63	3.8	.0	10.0
Q. Wiley C EBAX	-750	-7	-150	-7	AG	776	3.8	.0	10.0
R. Wiley C EBDX	150	-7	750	-7	AG	656	3.8	.0	10.0
S. Wiley C WBAX	750	7	150	7	AG	529	3.8	.0	10.0
T. Wiley C WBDX	-150	7	-750	7	AG	629	3.8	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-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: Henry Mayo Hospital General Plan
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	278.	.9	.0	.0	.0	.0	.0	.0	.4	.0
2. NW	98.	.9	.0	.0	.0	.1	.0	.0	.0	.1
3. SW	7.	1.0	.0	.1	.0	.2	.0	.0	.2	.0
4. NE	261.	1.0	.0	.1	.0	.0	.0	.0	.1	.0
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	1.0	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	264.	.9	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.4	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.7	.0	.1	.0	.3	.0	.1	.0	.0
11. SW mdblk	3.	.4	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.7	.0	.3	.0	.2	.0	.0	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.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	.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
     U=    .5 M/S             Z0= 100. CM            ALT=   373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	9	-150	9	0	AG	251	7.1	.0	13.5
B. Orchard NBD	9	0	9	150	AG	739	5.0	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	119	7.8	.0	10.0
D. Orchard SBA	-11	150	-11	0	AG	354	8.0	.0	10.0
E. Orchard SBD	-11	0	-11	-150	AG	359	5.0	.0	10.0
F. Orchard SBL	-9	150	0	0	AG	363	7.8	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1040	6.1	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1392	4.0	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	366	7.7	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1159	6.1	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1266	4.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	104	7.7	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	370	3.8	.0	13.5
N. Orchard NBDX	9	150	9	750	AG	739	3.8	.0	10.0
O. Orchard SBAX	-11	750	-11	150	AG	717	3.8	.0	10.0
P. Orchard SBDX	-11	-150	-11	-750	AG	359	3.8	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	1406	3.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1392	3.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1263	3.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1266	3.6	.0	10.0

(X1, Y1, X2, Y2 = LINK COORDINATES (M))

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
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	278.	1.7	.1	.0	.0	.0	.0	.0	.7	.2
2. NW	97.	1.8	.0	.1	.0	.2	.0	.1	.0	.0
3. SW	8.	1.6	.0	.1	.0	.3	.0	.2	.4	.0
4. NE	257.	1.8	.0	.3	.0	.1	.0	.1	.2	.0
5. ES mdblk	278.	1.5	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	98.	1.4	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.7	.0	.0	.0	.0	.0	.0	.9	.0
8. EN mdblk	262.	1.6	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	.9	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	1.2	.0	.1	.0	.5	.0	.3	.0	.0
11. SW mdblk	6.	.9	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	190.	1.1	.0	.6	.0	.1	.0	.1	.0	.0
13. ES blk	277.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.8	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.8	.2	.0	.0	.0	.0	.0	.0	.2	.1	.0
3. SW	.1	.0	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.2	.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.9	.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	.8	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.7
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.7	.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	.5	.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	.5	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Newhall NBA	9	-150	9	0	AG	129	7.1	.0	10.0
B. Newhall NBD	9	0	9	150	AG	256	4.6	.0	10.0
C. Newhall NBL	9	-150	0	0	AG	579	8.3	.0	10.0
D. Newhall SBA	-7	150	-7	0	AG	243	7.1	.0	10.0
E. Newhall SBD	-7	0	-7	-150	AG	735	5.0	.0	10.0
F. Newhall SBL	-5	150	0	0	AG	31	7.8	.0	10.0
G. Lyons EBA	-150	-9	0	-9	AG	1227	6.4	.0	13.5
H. Lyons EBD	0	-9	150	-9	AG	691	3.8	.0	10.0
I. Lyons EBL	-150	-5	0	0	AG	119	7.7	.0	10.0
J. Lyons WBA	150	7	0	7	AG	673	5.7	.0	10.0
K. Lyons WBD	0	7	-150	7	AG	1337	4.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	18	7.7	.0	10.0
M. Newhall NBAX	9	-750	9	-150	AG	708	3.8	.0	10.0
N. Newhall NBDX	9	150	9	750	AG	256	3.8	.0	10.0
O. Newhall SBAX	-7	750	-7	150	AG	274	3.8	.0	10.0
P. Newhall SBDX	-7	-150	-7	-750	AG	735	3.8	.0	10.0
Q. Lyons EBAX	-750	-9	-150	-9	AG	1346	3.6	.0	13.5
R. Lyons EBDX	150	-9	750	-9	AG	691	3.6	.0	10.0
S. Lyons WBAX	750	7	150	7	AG	691	3.6	.0	10.0
T. Lyons WBDX	-150	7	-750	7	AG	1337	3.6	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
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.	1.9	.0	.0	.2	.0	.1	.0	.9	.0
2. NW	170.	1.7	.0	.0	.3	.0	.4	.0	.3	.0
3. SW	279.	1.5	.0	.0	.0	.0	.0	.0	1.0	.0
4. NE	261.	1.5	.0	.0	.0	.0	.0	.0	.3	.0
5. ES mdblk	275.	1.0	.0	.0	.0	.0	.0	.0	.2	.4
6. WN mdblk	102.	1.4	.0	.0	.0	.0	.0	.0	.4	.0
7. WS mdblk	81.	1.6	.0	.0	.0	.0	.0	.0	1.0	.0
8. EN mdblk	263.	1.2	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	348.	1.3	.2	.0	.7	.0	.2	.0	.1	.0
10. NW mdblk	175.	.8	.0	.0	.1	.3	.0	.0	.0	.0
11. SW mdblk	9.	1.1	.0	.0	.2	.0	.5	.0	.0	.0
12. NE mdblk	186.	.8	.0	.2	.1	.0	.0	.0	.0	.0
13. ES blk	276.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.1	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	.0	.1	.6	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.8	.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	.6	.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	.3	.0	.0	.7
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.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	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.5	.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: Henry Mayo Hospital General Plan
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valencia NBA	9	-150	9	0	AG	1698	6.1	.0	13.5
B. Valencia NBD	9	0	9	150	AG	2244	4.2	.0	11.8
C. Valencia NBL	5	-150	0	0	AG	92	7.7	.0	10.0
D. Valencia SBA	-12	150	-12	0	AG	1490	5.8	.0	20.5
E. Valencia SBD	-12	0	-12	-150	AG	1445	3.8	.0	13.5
F. Valencia SBL	-5	150	0	0	AG	87	7.7	.0	10.0
G. Magic Mt EBA	-150	-11	0	-11	AG	573	7.3	.0	10.0
H. Magic Mt EBD	0	-11	150	-11	AG	791	4.8	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	662	8.4	.0	10.0
J. Magic Mt WBA	150	9	0	9	AG	471	7.3	.0	13.5
K. Magic Mt WBD	0	9	-150	9	AG	790	4.8	.0	10.0
L. Magic Mt WBL	150	5	0	0	AG	197	7.7	.0	10.0
M. Valenci NBAX	9	-750	9	-150	AG	1790	3.6	.0	13.5
N. Valenci NBDX	9	150	9	750	AG	2244	3.6	.0	11.8
O. Valenci SBAX	-12	750	-12	150	AG	1577	3.6	.0	20.5
P. Valenci SBDX	-12	-150	-12	-750	AG	1445	3.6	.0	13.5
Q. Magic M EBAX	-750	-11	-150	-11	AG	1235	3.6	.0	10.0
R. Magic M EBDX	150	-11	750	-11	AG	791	3.6	.0	10.0
S. Magic M WBAX	750	9	150	9	AG	668	3.6	.0	13.5
T. Magic M WBDX	-150	9	-750	9	AG	790	3.6	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-17	1.8
2. NW	-24	15	1.8
3. SW	-21	-17	1.8
4. NE	16	17	1.8
5. ES mdblk	150	-17	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-24	150	1.8
11. SW mdblk	-21	-150	1.8
12. NE mdblk	16	150	1.8
13. ES blk	600	-17	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	17	-600	1.8
18. NW blk	-24	600	1.8
19. SW blk	-21	-600	1.8
20. NE blk	16	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
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	350.	2.2	.4	.8	.0	.3	.0	.0	.0	.3
2. NW	166.	1.8	.3	.0	.0	.2	.5	.0	.1	.0
3. SW	7.	2.2	.0	.1	.0	.8	.2	.0	.3	.0
4. NE	188.	2.3	1.0	.3	.0	.0	.1	.0	.0	.1
5. ES mdblk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	99.	1.4	.1	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	80.	1.8	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	1.4	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	2.2	1.3	.1	.0	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.7	.2	.1	.0	.9	.0	.0	.0	.0
11. SW mdblk	8.	1.6	.2	.2	.0	.1	.7	.0	.0	.0
12. NE mdblk	189.	2.0	.0	1.2	.0	.2	.1	.0	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.7	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
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	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	.2	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	.2	.0	.1	.0	.0	.3	.1	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.6	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.1	.5	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.9	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.7	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.8	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	1.1	.3	.0	.0	.0	.0	.0

HENRY MAYO HOSPITAL

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

INTERIM YEAR WITHOUT PROJECT SCENARIO

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Rockwell NBA	7	-150	7	0	AG	216	2.9	.0	10.0
B. Rockwell NBD	7	0	7	150	AG	532	2.0	.0	10.0
C. Rockwell NBL	5	-150	0	0	AG	200	3.2	.0	10.0
D. Rockwell SBA	-7	150	-7	0	AG	500	3.3	.0	10.0
E. Rockwell SBD	-7	0	-7	-150	AG	748	3.3	.0	10.0
F. Rockwell SBL	-5	150	0	0	AG	346	3.4	.0	10.0
G. McBean EBA	-150	-9	0	-9	AG	1938	2.7	.0	13.5
H. McBean EBD	0	-9	150	-9	AG	1880	1.8	.0	11.8
I. McBean EBL	-150	-5	0	0	AG	310	3.4	.0	10.0
J. McBean WBA	150	9	0	9	AG	953	2.4	.0	13.5
K. McBean WBD	0	9	-150	9	AG	1331	1.7	.0	11.8
L. McBean WBL	150	5	0	0	AG	28	3.2	.0	10.0
M. Rockwel NBAX	7	-750	7	-150	AG	416	1.7	.0	10.0
N. Rockwel NBDX	7	150	7	750	AG	532	1.7	.0	10.0
O. Rockwel SBAX	-7	750	-7	150	AG	846	1.7	.0	10.0
P. Rockwel SBDX	-7	-150	-7	-750	AG	748	1.7	.0	10.0
Q. McBean EBAX	-750	-9	-150	-9	AG	2248	1.6	.0	13.5
R. McBean EBDX	150	-9	750	-9	AG	1880	1.6	.0	11.8
S. McBean WBAX	750	9	150	9	AG	981	1.6	.0	13.5
T. McBean WBDX	-150	9	-750	9	AG	1331	1.6	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	278.	1.1	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	172.	.9	.0	.0	.0	.0	.3	.0	.2	.0
3. SW	9.	.9	.0	.0	.0	.2	.0	.1	.3	.0
4. NE	259.	.8	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	100.	.7	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	81.	1.0	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	.7	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.5	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.6	.0	.0	.0	.2	.0	.1	.0	.0
11. SW mdblk	7.	.6	.0	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	188.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.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.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
	LINK COORDINATES (M)								
A. McBean NBA	16	-150	16	0	AG	1984	3.1	.0	20.5
B. McBean NBD	16	0	16	150	AG	2306	2.3	.0	13.5
C. McBean NBL	9	-150	0	0	AG	120	3.2	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	2522	3.3	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	1888	2.0	.0	13.5
F. McBean SBL	-9	150	0	0	AG	150	3.2	.0	10.0
G. Valencia EBA	-150	-14	0	-14	AG	1740	2.9	.0	17.0
H. Valencia EBD	0	-14	150	-14	AG	2528	2.7	.0	13.5
I. Valencia EBL	-150	-9	0	0	AG	920	3.4	.0	10.0
J. Valencia WBA	150	14	0	14	AG	1420	2.7	.0	17.0
K. Valencia WBD	0	14	-150	14	AG	2500	2.7	.0	13.5
L. Valencia WBL	150	9	0	0	AG	366	3.2	.0	10.0
M. McBean NBAX	16	-750	16	-150	AG	2104	1.6	.0	20.5
N. McBean NBDX	16	150	16	750	AG	2306	1.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	2672	1.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	1888	1.6	.0	13.5
Q. Valenci EBAX	-750	-14	-150	-14	AG	2660	1.6	.0	17.0
R. Valenci EBDX	150	-14	750	-14	AG	2528	1.6	.0	13.5
S. Valenci WBAX	750	14	150	14	AG	1786	1.6	.0	17.0
T. Valenci WBDX	-150	14	-750	14	AG	2500	1.6	.0	13.5

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	28	-22	1.8
2. NW	-28	22	1.8
3. SW	-24	-24	1.8
4. NE	24	24	1.8
5. ES mdblk	150	-22	1.8
6. WN mdblk	-150	22	1.8
7. WS mdblk	-150	-24	1.8
8. EN mdblk	150	24	1.8
9. SE mdblk	28	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-24	-150	1.8
12. NE mdblk	24	150	1.8
13. ES blk	600	-22	1.8
14. WN blk	-600	22	1.8
15. WS blk	-600	-24	1.8
16. EN blk	600	24	1.8
17. SE blk	28	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-24	-600	1.8
20. NE blk	24	600	1.8

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	282.	1.6	.3	.0	.0	.0	.0	.0	.3	.4
2. NW	104.	1.6	.0	.1	.0	.5	.0	.0	.0	.2
3. SW	7.	1.6	.0	.0	.0	.7	.2	.0	.3	.0
4. NE	259.	1.6	.0	.3	.0	.2	.0	.0	.0	.0
5. ES mdblk	279.	1.4	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	100.	1.4	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	78.	1.2	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	261.	1.1	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	350.	1.2	.6	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	170.	1.4	.1	.0	.0	.9	.0	.0	.0	.0
11. SW mdblk	7.	1.0	.0	.0	.0	.1	.5	.0	.0	.0
12. NE mdblk	190.	1.1	.0	.7	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.9	.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.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	.9	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.1	.0	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.1	.2	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.4	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. McBean NBA	14	-150	14	0	AG	2355	2.9	.0	17.0
B. McBean NBD	14	0	14	150	AG	3177	2.4	.0	13.5
C. McBean NBL	9	-150	0	0	AG	356	3.2	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	2885	2.9	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	2963	1.9	.0	17.0
F. McBean SBL	-9	150	0	0	AG	480	3.3	.0	10.0
G. Magic Mt EBA	-150	-12	0	-12	AG	1659	3.4	.0	13.5
H. Magic Mt EBD	0	-12	150	-12	AG	2088	3.4	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	650	3.4	.0	10.0
J. Magic Mt WBA	150	12	0	12	AG	1160	3.4	.0	13.5
K. Magic Mt WBD	0	12	-150	12	AG	1486	3.3	.0	10.0
L. Magic Mt WBL	150	9	0	0	AG	169	3.2	.0	10.0
M. McBean NBAX	14	-750	14	-150	AG	2711	1.6	.0	17.0
N. McBean NBDX	14	150	14	750	AG	3177	1.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	3365	1.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	2963	1.6	.0	17.0
Q. Magic M EBAX	-750	-12	-150	-12	AG	2309	1.6	.0	13.5
R. Magic M EBDX	150	-12	750	-12	AG	2088	1.6	.0	10.0
S. Magic M WBAX	750	12	150	12	AG	1329	1.6	.0	13.5
T. Magic M WBDX	-150	12	-750	12	AG	1486	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	24	-19	1.8
2. NW	-28	19	1.8
3. SW	-26	-21	1.8
4. NE	22	21	1.8
5. ES mdblk	150	-19	1.8
6. WN mdblk	-150	19	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	24	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-26	-150	1.8
12. NE mdblk	22	150	1.8
13. ES blk	600	-19	1.8
14. WN blk	-600	19	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	24	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-26	-600	1.8
20. NE blk	22	600	1.8

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	282.	1.8	.4	.0	.0	.0	.1	.0	.4	.5
2. NW	104.	1.6	.0	.2	.0	.5	.0	.0	.0	.2
3. SW	9.	1.8	.0	.0	.0	.7	.2	.0	.4	.0
4. NE	257.	1.7	.0	.5	.0	.2	.0	.0	.2	.0
5. ES mdblk	279.	1.5	.0	.0	.0	.0	.0	.0	.0	.9
6. WN mdblk	100.	1.3	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.4	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	261.	1.1	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	350.	1.4	.8	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	170.	1.4	.1	.0	.0	.8	.0	.0	.0	.0
11. SW mdblk	9.	1.2	.0	.1	.0	.0	.6	.0	.0	.0
12. NE mdblk	190.	1.5	.0	.9	.0	.0	.1	.0	.0	.0
13. ES blk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	352.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	1.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Orchard NBA	7	-150	7	0	AG	1301	3.2	.0	10.0
B. Orchard NBD	7	0	7	150	AG	1233	2.1	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	60	3.2	.0	10.0
D. Orchard SBA	-9	150	-9	0	AG	925	2.8	.0	13.5
E. Orchard SBD	-9	0	-9	-150	AG	1206	2.1	.0	10.0
F. Orchard SBL	-5	150	0	0	AG	339	3.4	.0	10.0
G. Wiley Cy EBA	-150	-11	0	-11	AG	910	2.8	.0	10.0
H. Wiley Cy EBD	0	-11	150	-11	AG	1639	2.7	.0	10.0
I. Wiley Cy EBL	-150	-9	0	0	AG	210	3.2	.0	10.0
J. Wiley Cy WBA	150	9	0	9	AG	632	2.7	.0	13.5
K. Wiley Cy WBD	0	9	-150	9	AG	529	1.9	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	230	3.3	.0	10.0
M. Orchard NBAX	7	-750	7	-150	AG	1361	1.7	.0	10.0
N. Orchard NBDX	7	150	7	750	AG	1233	1.7	.0	10.0
O. Orchard SBAX	-9	750	-9	150	AG	1264	1.7	.0	13.5
P. Orchard SBDX	-9	-150	-9	-750	AG	1206	1.7	.0	10.0
Q. Wiley C EBAX	-750	-11	-150	-11	AG	1120	1.7	.0	10.0
R. Wiley C EBDX	150	-11	750	-11	AG	1639	1.7	.0	10.0
S. Wiley C WBAX	750	9	150	9	AG	862	1.7	.0	13.5
T. Wiley C WBDX	-150	9	-750	9	AG	529	1.7	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	349.	1.1	.2	.3	.0	.1	.0	.1	.0	.3
2. NW	99.	.8	.0	.0	.0	.2	.0	.0	.0	.1
3. SW	82.	1.1	.1	.0	.0	.0	.2	.0	.0	.5
4. NE	188.	1.0	.4	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	279.	.9	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	260.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	.9	.6	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.8	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.8	.1	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	187.	.8	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.6	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	9	-150	9	0	AG	1040	3.4	.0	11.8
B. Orchard NBD	9	0	9	150	AG	120	2.0	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	382	3.2	.0	10.0
D. Orchard SBA	-2	150	-2	0	AG	100	2.9	.0	10.0
E. Orchard SBD	-2	0	-2	-150	AG	1689	3.4	.0	10.0
F. Orchard SBL	-2	150	0	0	AG	60	3.2	.0	10.0
G. McBean EBA	-150	-9	0	-9	AG	1734	2.6	.0	13.5
H. McBean EBD	0	-9	150	-9	AG	2065	1.8	.0	11.8
I. McBean EBL	-150	-5	0	0	AG	40	3.2	.0	10.0
J. McBean WBA	150	12	0	12	AG	650	2.4	.0	13.5
K. McBean WBD	0	12	-150	12	AG	1042	1.7	.0	11.8
L. McBean WBL	150	9	0	0	AG	910	3.4	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	1422	1.7	.0	11.8
N. Orchard NBDX	9	150	9	750	AG	120	1.7	.0	10.0
O. Orchard SBAX	-2	750	-2	150	AG	160	1.7	.0	10.0
P. Orchard SBDX	-2	-150	-2	-750	AG	1689	1.7	.0	10.0
Q. McBean EBAX	-750	-9	-150	-9	AG	1774	1.6	.0	13.5
R. McBean EBDX	150	-9	750	-9	AG	2065	1.6	.0	11.8
S. McBean WBAX	750	12	150	12	AG	1560	1.6	.0	13.5
T. McBean WBDX	-150	12	-750	12	AG	1042	1.6	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.3	.2	.0	.0	.0	.2	.0	.5	.1
2. NW	173.	1.3	.2	.0	.1	.0	.5	.0	.1	.0
3. SW	77.	1.4	.1	.0	.0	.0	.4	.0	.0	.4
4. NE	188.	1.2	.4	.0	.0	.0	.3	.0	.0	.1
5. ES mdblk	278.	.9	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	99.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.9	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	257.	.8	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	347.	1.0	.5	.0	.1	.0	.3	.0	.0	.0
10. NW mdblk	177.	.5	.0	.0	.0	.0	.1	.0	.0	.0
11. SW mdblk	12.	1.2	.2	.0	.1	.0	.8	.0	.0	.0
12. NE mdblk	183.	.5	.0	.0	.0	.0	.1	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	182.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

CONC/LINK (PPM)

RECEPTOR	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	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.1	.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	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.4	.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	.2	.0	.0	.4	.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: Henry Mayo Hospital General Plan
RUN: 2018nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM            ALT=   373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Wiley Cy NBA	9	-150	9	0	AG	570	3.1	.0	13.5
B. Wiley Cy NBD	9	0	9	150	AG	1037	3.2	.0	10.0
C. Wiley Cy NBL	5	-150	0	0	AG	230	3.3	.0	10.0
D. Wiley Cy SBA	-9	150	-9	0	AG	808	3.3	.0	13.5
E. Wiley Cy SBD	-9	0	-9	-150	AG	842	2.8	.0	10.0
F. Wiley Cy SBL	-5	150	0	0	AG	128	3.2	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1510	2.9	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1618	2.0	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	510	3.3	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1217	2.5	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1666	1.8	.0	11.8
L. Lyons WBL	150	5	0	0	AG	190	3.2	.0	10.0
M. Wiley C NBAX	9	-750	9	-150	AG	800	1.7	.0	13.5
N. Wiley C NBDX	9	150	9	750	AG	1037	1.7	.0	10.0
O. Wiley C SBAX	-9	750	-9	150	AG	936	1.7	.0	13.5
P. Wiley C SBDX	-9	-150	-9	-750	AG	842	1.7	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	2020	1.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1618	1.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1407	1.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1666	1.6	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.1	.1	.0	.0	.0	.0	.0	.5	.1
2. NW	98.	1.0	.0	.1	.0	.2	.0	.0	.0	.0
3. SW	8.	1.0	.0	.1	.0	.3	.1	.0	.3	.0
4. NE	257.	1.1	.0	.2	.0	.0	.0	.0	.2	.0
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	99.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	1.0	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.7	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	7.	.7	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	189.	.8	.0	.5	.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.	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Tourneme NBA	2	-150	2	0	AG	39	2.9	.0	10.0
B. Tourneme NBD	2	0	2	150	AG	406	2.8	.0	10.0
C. Tourneme NBL	2	-150	0	0	AG	60	3.2	.0	10.0
D. Tourneme SBA	-4	150	-4	0	AG	184	2.9	.0	10.0
E. Tourneme SBD	-4	0	-4	-150	AG	57	2.0	.0	10.0
F. Tourneme SBL	-2	150	0	0	AG	380	3.4	.0	10.0
G. Wiley Cy EBA	-150	-7	0	-7	AG	670	2.5	.0	10.0
H. Wiley Cy EBD	0	-7	150	-7	AG	1060	1.9	.0	10.0
I. Wiley Cy EBL	-150	-5	0	0	AG	257	3.3	.0	10.0
J. Wiley Cy WBA	150	7	0	7	AG	659	2.5	.0	10.0
K. Wiley Cy WBD	0	7	-150	7	AG	756	1.8	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	30	3.2	.0	10.0
M. Tournem NBAX	2	-750	2	-150	AG	99	1.7	.0	10.0
N. Tournem NBDX	2	150	2	750	AG	406	1.7	.0	10.0
O. Tournem SBAX	-4	750	-4	150	AG	564	1.7	.0	10.0
P. Tournem SBDX	-4	-150	-4	-750	AG	57	1.7	.0	10.0
Q. Wiley C EBAX	-750	-7	-150	-7	AG	927	1.7	.0	10.0
R. Wiley C EBDX	150	-7	750	-7	AG	1060	1.7	.0	10.0
S. Wiley C WBAX	750	7	150	7	AG	689	1.7	.0	10.0
T. Wiley C WBDX	-150	7	-750	7	AG	756	1.7	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-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: Henry Mayo Hospital General Plan
RUN: 2018nP-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	353.	.6	.0	.2	.0	.0	.0	.2	.0	.1
2. NW	98.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	8.	.6	.0	.1	.0	.0	.0	.1	.1	.0
4. NE	261.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.5	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.4	.0	.1	.0	.0	.0	.2	.0	.0
11. SW mdblk	3.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.4	.0	.2	.0	.0	.0	.1	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	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	357.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	3.	.1	.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: Henry Mayo Hospital General Plan
RUN: 2018nP-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	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.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	.3	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.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: Henry Mayo Hospital General Plan
RUN: 2018nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Orchard NBA	9	-150	9	0	AG	296	2.9	.0	13.5
B. Orchard NBD	9	0	9	150	AG	1025	3.2	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	90	3.2	.0	10.0
D. Orchard SBA	-11	150	-11	0	AG	361	3.2	.0	10.0
E. Orchard SBD	-11	0	-11	-150	AG	372	2.2	.0	10.0
F. Orchard SBL	-9	150	0	0	AG	520	3.3	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1130	2.6	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1700	2.0	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	529	3.3	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1700	3.2	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1659	2.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	130	3.2	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	386	1.7	.0	13.5
N. Orchard NBDX	9	150	9	750	AG	1025	1.7	.0	10.0
O. Orchard SBAX	-11	750	-11	150	AG	881	1.7	.0	10.0
P. Orchard SBDX	-11	-150	-11	-750	AG	372	1.7	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	1659	1.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1700	1.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1830	1.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1659	1.6	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.0	.0	.3	.0	.0	.0	.0	.0	.2
2. NW	97.	1.2	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	79.	.8	.0	.0	.0	.0	.0	.0	.1	.3
4. NE	257.	1.1	.0	.2	.0	.0	.0	.0	.1	.0
5. ES mdblk	279.	.9	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	.9	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.5	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	167.	.7	.0	.1	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.5	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	190.	.8	.0	.5	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.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	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

CONC/LINK (PPM)

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	373. (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. Newhall NBA	9	-150	9	0	AG	160	2.9	.0	10.0
B. Newhall NBD	9	0	9	150	AG	120	2.0	.0	10.0
C. Newhall NBL	9	-150	0	0	AG	478	3.3	.0	10.0
D. Newhall SBA	-7	150	-7	0	AG	250	2.9	.0	10.0
E. Newhall SBD	-7	0	-7	-150	AG	769	2.2	.0	10.0
F. Newhall SBL	-5	150	0	0	AG	30	3.2	.0	10.0
G. Lyons EBA	-150	-9	0	-9	AG	1696	3.2	.0	13.5
H. Lyons EBD	0	-9	150	-9	AG	1267	1.8	.0	10.0
I. Lyons EBL	-150	-5	0	0	AG	10	3.2	.0	10.0
J. Lyons WBA	150	7	0	7	AG	1205	2.7	.0	10.0
K. Lyons WBD	0	7	-150	7	AG	1763	2.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	90	3.2	.0	10.0
M. Newhall NBAX	9	-750	9	-150	AG	638	1.7	.0	10.0
N. Newhall NBDX	9	150	9	750	AG	120	1.7	.0	10.0
O. Newhall SBAX	-7	750	-7	150	AG	280	1.7	.0	10.0
P. Newhall SBDX	-7	-150	-7	-750	AG	769	1.7	.0	10.0
Q. Lyons EBAX	-750	-9	-150	-9	AG	1706	1.6	.0	13.5
R. Lyons EBDX	150	-9	750	-9	AG	1267	1.6	.0	10.0
S. Lyons WBAX	750	7	150	7	AG	1295	1.6	.0	10.0
T. Lyons WBDX	-150	7	-750	7	AG	1763	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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.	1.1	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	171.	.8	.0	.0	.1	.0	.2	.0	.2	.0
3. SW	279.	.9	.0	.0	.0	.0	.0	.0	.7	.0
4. NE	261.	.8	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	100.	.8	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	81.	1.0	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	348.	.5	.0	.0	.2	.0	.0	.0	.0	.0
10. NW mdblk	175.	.4	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	9.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.7	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.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: Henry Mayo Hospital General Plan
RUN: 2018nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.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	.1	.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	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.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	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.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	.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: Henry Mayo Hospital General Plan
RUN: 2018nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valencia NBA	9	-150	9	0	AG	2156	2.9	.0	13.5
B. Valencia NBD	9	0	9	150	AG	2804	2.4	.0	11.8
C. Valencia NBL	5	-150	0	0	AG	110	3.2	.0	10.0
D. Valencia SBA	-12	150	-12	0	AG	1512	2.6	.0	20.5
E. Valencia SBD	-12	0	-12	-150	AG	1449	1.7	.0	13.5
F. Valencia SBL	-5	150	0	0	AG	120	3.2	.0	10.0
G. Magic Mt EBA	-150	-11	0	-11	AG	900	3.3	.0	10.0
H. Magic Mt EBD	0	-11	150	-11	AG	1722	3.4	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	1080	3.4	.0	10.0
J. Magic Mt WBA	150	9	0	9	AG	910	3.3	.0	13.5
K. Magic Mt WBD	0	9	-150	9	AG	1360	3.3	.0	10.0
L. Magic Mt WBL	150	5	0	0	AG	547	3.4	.0	10.0
M. Valenci NBAX	9	-750	9	-150	AG	2266	1.6	.0	13.5
N. Valenci NBDX	9	150	9	750	AG	2804	1.6	.0	11.8
O. Valenci SBAX	-12	750	-12	150	AG	1632	1.6	.0	20.5
P. Valenci SBDX	-12	-150	-12	-750	AG	1449	1.6	.0	13.5
Q. Magic M EBAX	-750	-11	-150	-11	AG	1980	1.6	.0	10.0
R. Magic M EBDX	150	-11	750	-11	AG	1722	1.6	.0	10.0
S. Magic M WBAX	750	9	150	9	AG	1457	1.6	.0	13.5
T. Magic M WBDX	-150	9	-750	9	AG	1360	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-17	1.8
2. NW	-24	15	1.8
3. SW	-21	-17	1.8
4. NE	16	17	1.8
5. ES mdblk	150	-17	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-24	150	1.8
11. SW mdblk	-21	-150	1.8
12. NE mdblk	16	150	1.8
13. ES blk	600	-17	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	17	-600	1.8
18. NW blk	-24	600	1.8
19. SW blk	-21	-600	1.8
20. NE blk	16	600	1.8

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-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	350.	1.6	.2	.6	.0	.1	.0	.0	.0	.4
2. NW	103.	1.4	.0	.2	.0	.2	.0	.0	.0	.2
3. SW	81.	1.3	.2	.0	.0	.0	.2	.0	.1	.5
4. NE	257.	1.5	.0	.4	.0	.1	.0	.0	.1	.0
5. ES mdblk	278.	1.3	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	99.	1.2	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	80.	1.3	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	261.	1.0	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	1.3	.8	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.9	.1	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	9.	.9	.1	.1	.0	.0	.3	.0	.0	.0
12. NE mdblk	189.	1.3	.0	.8	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.9	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

HENRY MAYO HOSPITAL

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

INTERIM YEAR WITH PROJECT SCENARIO

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 373. (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. Rockwell NBA	*	7	-150	7	0	*	AG	220	2.9	.0	10.0
B. Rockwell NBD	*	7	0	7	150	*	AG	550	2.0	.0	10.0
C. Rockwell NBL	*	5	-150	0	0	*	AG	200	3.2	.0	10.0
D. Rockwell SBA	*	-7	150	-7	0	*	AG	500	3.3	.0	10.0
E. Rockwell SBD	*	-7	0	-7	-150	*	AG	770	3.3	.0	10.0
F. Rockwell SBL	*	-5	150	0	0	*	AG	360	3.4	.0	10.0
G. McBean EBA	*	-150	-9	0	-9	*	AG	2000	2.7	.0	13.5
H. McBean EBD	*	0	-9	150	-9	*	AG	1960	1.8	.0	11.8
I. McBean EBL	*	-150	-5	0	0	*	AG	310	3.4	.0	10.0
J. McBean WBA	*	150	9	0	9	*	AG	1160	2.4	.0	13.5
K. McBean WBD	*	0	9	-150	9	*	AG	1520	1.8	.0	11.8
L. McBean WBL	*	150	5	0	0	*	AG	50	3.2	.0	10.0
M. Rockwel NBAX	*	7	-750	7	-150	*	AG	420	1.7	.0	10.0
N. Rockwel NBDX	*	7	150	7	750	*	AG	550	1.7	.0	10.0
O. Rockwel SBAX	*	-7	750	-7	150	*	AG	860	1.7	.0	10.0
P. Rockwel SBDX	*	-7	-150	-7	-750	*	AG	770	1.7	.0	10.0
Q. McBean EBAX	*	-750	-9	-150	-9	*	AG	2310	1.6	.0	13.5
R. McBean EBDX	*	150	-9	750	-9	*	AG	1960	1.6	.0	11.8
S. McBean WBAX	*	750	9	150	9	*	AG	1210	1.6	.0	13.5
T. McBean WBDX	*	-150	9	-750	9	*	AG	1520	1.6	.0	11.8

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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	278.	1.1	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	172.	.9	.0	.0	.0	.0	.3	.0	.2	.0
3. SW	9.	1.0	.0	.0	.0	.2	.1	.1	.3	.0
4. NE	259.	.9	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	100.	.8	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	81.	1.1	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.5	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.6	.0	.0	.0	.3	.0	.1	.0	.0
11. SW mdblk	7.	.7	.0	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	188.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.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.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. McBean NBA	16	-150	16	0	AG	2100	3.1	.0	20.5
B. McBean NBD	16	0	16	150	AG	2370	2.3	.0	13.5
C. McBean NBL	9	-150	0	0	AG	120	3.2	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	2540	3.3	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	1920	2.0	.0	13.5
F. McBean SBL	-9	150	0	0	AG	150	3.2	.0	10.0
G. Valencia EBA	-150	-14	0	-14	AG	1740	2.9	.0	17.0
H. Valencia EBD	0	-14	150	-14	AG	2580	2.7	.0	13.5
I. Valencia EBL	-150	-9	0	0	AG	920	3.4	.0	10.0
J. Valencia WBA	150	14	0	14	AG	1420	2.7	.0	17.0
K. Valencia WBD	0	14	-150	14	AG	2500	2.7	.0	13.5
L. Valencia WBL	150	9	0	0	AG	380	3.2	.0	10.0
M. McBean NBAX	16	-750	16	-150	AG	2220	1.6	.0	20.5
N. McBean NBDX	16	150	16	750	AG	2370	1.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	2690	1.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	1920	1.6	.0	13.5
Q. Valenci EBAX	-750	-14	-150	-14	AG	2660	1.6	.0	17.0
R. Valenci EBDX	150	-14	750	-14	AG	2580	1.6	.0	13.5
S. Valenci WBAX	750	14	150	14	AG	1800	1.6	.0	17.0
T. Valenci WBDX	-150	14	-750	14	AG	2500	1.6	.0	13.5

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	28	-22	1.8
2. NW	-28	22	1.8
3. SW	-24	-24	1.8
4. NE	24	24	1.8
5. ES mdblk	150	-22	1.8
6. WN mdblk	-150	22	1.8
7. WS mdblk	-150	-24	1.8
8. EN mdblk	150	24	1.8
9. SE mdblk	28	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-24	-150	1.8
12. NE mdblk	24	150	1.8
13. ES blk	600	-22	1.8
14. WN blk	-600	22	1.8
15. WS blk	-600	-24	1.8
16. EN blk	600	24	1.8
17. SE blk	28	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-24	-600	1.8
20. NE blk	24	600	1.8

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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	283.	1.6	.4	.0	.0	.0	.0	.0	.3	.4
2. NW	104.	1.6	.0	.1	.0	.5	.0	.0	.0	.2
3. SW	7.	1.6	.0	.0	.0	.7	.2	.0	.3	.0
4. NE	259.	1.6	.0	.3	.0	.2	.0	.0	.0	.0
5. ES mdblk	279.	1.4	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	100.	1.4	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	78.	1.2	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	261.	1.1	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	350.	1.2	.7	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	170.	1.4	.1	.0	.0	.9	.0	.0	.0	.0
11. SW mdblk	8.	1.0	.0	.0	.0	.1	.5	.0	.0	.0
12. NE mdblk	190.	1.2	.0	.7	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.9	.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.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	.9	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

CONC/LINK (PPM)

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM            ALT=   373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. McBean NBA	14	-150	14	0	AG	2410	3.2	.0	17.0
B. McBean NBD	14	0	14	150	AG	3230	2.4	.0	13.5
C. McBean NBL	9	-150	0	0	AG	360	3.2	.0	10.0
D. McBean SBA	-16	150	-16	0	AG	2900	2.9	.0	20.5
E. McBean SBD	-16	0	-16	-150	AG	2980	1.9	.0	17.0
F. McBean SBL	-9	150	0	0	AG	480	3.3	.0	10.0
G. Magic Mt EBA	-150	-12	0	-12	AG	1660	3.4	.0	13.5
H. Magic Mt EBD	0	-12	150	-12	AG	2090	3.4	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	650	3.4	.0	10.0
J. Magic Mt WBA	150	12	0	12	AG	1160	3.4	.0	13.5
K. Magic Mt WBD	0	12	-150	12	AG	1490	3.3	.0	10.0
L. Magic Mt WBL	150	9	0	0	AG	170	3.2	.0	10.0
M. McBean NBAX	14	-750	14	-150	AG	2770	1.6	.0	17.0
N. McBean NBDX	14	150	14	750	AG	3230	1.6	.0	13.5
O. McBean SBAX	-16	750	-16	150	AG	3380	1.6	.0	20.5
P. McBean SBDX	-16	-150	-16	-750	AG	2980	1.6	.0	17.0
Q. Magic M EBAX	-750	-12	-150	-12	AG	2310	1.6	.0	13.5
R. Magic M EBDX	150	-12	750	-12	AG	2090	1.6	.0	10.0
S. Magic M WBAX	750	12	150	12	AG	1330	1.6	.0	13.5
T. Magic M WBDX	-150	12	-750	12	AG	1490	1.6	.0	10.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	24	-19	1.8
2. NW	-28	19	1.8
3. SW	-26	-21	1.8
4. NE	22	21	1.8
5. ES mdblk	150	-19	1.8
6. WN mdblk	-150	19	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	24	-150	1.8
10. NW mdblk	-28	150	1.8
11. SW mdblk	-26	-150	1.8
12. NE mdblk	22	150	1.8
13. ES blk	600	-19	1.8
14. WN blk	-600	19	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	24	-600	1.8
18. NW blk	-28	600	1.8
19. SW blk	-26	-600	1.8
20. NE blk	22	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
			CONC/LINK (PPM)							
1. SE	282.	1.9	.5	.0	.0	.0	.1	.0	.4	.5
2. NW	104.	1.6	.0	.2	.0	.5	.0	.0	.0	.2
3. SW	9.	1.8	.0	.0	.0	.7	.2	.0	.4	.0
4. NE	189.	1.7	.6	.3	.0	.0	.0	.0	.0	.2
5. ES mdblk	279.	1.5	.0	.0	.0	.0	.0	.0	.0	.9
6. WN mdblk	100.	1.3	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.4	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	261.	1.2	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	350.	1.5	.9	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	169.	1.5	.2	.0	.0	.9	.0	.0	.0	.0
11. SW mdblk	9.	1.2	.0	.1	.0	.0	.6	.0	.0	.0
12. NE mdblk	190.	1.5	.0	.9	.0	.0	.1	.0	.0	.0
13. ES blk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.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	352.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	1.1	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	7	-150	7	0	AG	1320	3.2	.0	10.0
B. Orchard NBD	7	0	7	150	AG	1270	2.1	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	60	3.2	.0	10.0
D. Orchard SBA	-9	150	-9	0	AG	1010	2.9	.0	13.5
E. Orchard SBD	-9	0	-9	-150	AG	1290	2.1	.0	10.0
F. Orchard SBL	-5	150	0	0	AG	420	3.4	.0	10.0
G. Wiley Cy EBA	-150	-11	0	-11	AG	910	2.8	.0	10.0
H. Wiley Cy EBD	0	-11	150	-11	AG	1720	2.7	.0	10.0
I. Wiley Cy EBL	-150	-9	0	0	AG	210	3.2	.0	10.0
J. Wiley Cy WBA	150	9	0	9	AG	650	2.7	.0	13.5
K. Wiley Cy WBD	0	9	-150	9	AG	530	1.9	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	230	3.3	.0	10.0
M. Orchard NBAX	7	-750	7	-150	AG	1380	1.7	.0	10.0
N. Orchard NBDX	7	150	7	750	AG	1270	1.7	.0	10.0
O. Orchard SBAX	-9	750	-9	150	AG	1430	1.7	.0	13.5
P. Orchard SBDX	-9	-150	-9	-750	AG	1290	1.7	.0	10.0
Q. Wiley C EBAX	-750	-11	-150	-11	AG	1120	1.7	.0	10.0
R. Wiley C EBDX	150	-11	750	-11	AG	1720	1.7	.0	10.0
S. Wiley C WBAX	750	9	150	9	AG	880	1.7	.0	13.5
T. Wiley C WBDX	-150	9	-750	9	AG	530	1.7	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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	349.	1.2	.2	.3	.0	.1	.0	.1	.0	.3
2. NW	99.	.9	.0	.0	.0	.2	.0	.0	.0	.1
3. SW	82.	1.1	.1	.0	.0	.0	.2	.0	.0	.5
4. NE	188.	1.0	.4	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	279.	.9	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.8	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	260.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	1.0	.6	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.9	.0	.0	.0	.4	.0	.1	.0	.0
11. SW mdblk	8.	.8	.1	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	188.	.8	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.6	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Orchard NBA	9	-150	9	0	AG	1078	3.4	.0	11.8
B. Orchard NBD	9	0	9	150	AG	188	2.0	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	382	3.2	.0	10.0
D. Orchard SBA	-2	150	-2	0	AG	331	3.2	.0	10.0
E. Orchard SBD	-2	0	-2	-150	AG	1860	3.4	.0	10.0
F. Orchard SBL	-2	150	0	0	AG	115	3.2	.0	10.0
G. McBean EBA	-150	-9	0	-9	AG	1750	2.6	.0	13.5
H. McBean EBD	0	-9	150	-9	AG	2136	1.9	.0	11.8
I. McBean EBL	-150	-5	0	0	AG	60	3.2	.0	10.0
J. McBean WBA	150	12	0	12	AG	727	2.4	.0	13.5
K. McBean WBD	0	12	-150	12	AG	1169	1.7	.0	11.8
L. McBean WBL	150	9	0	0	AG	910	3.4	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	1460	1.7	.0	11.8
N. Orchard NBDX	9	150	9	750	AG	188	1.7	.0	10.0
O. Orchard SBAX	-2	750	-2	150	AG	446	1.7	.0	10.0
P. Orchard SBDX	-2	-150	-2	-750	AG	1860	1.7	.0	10.0
Q. McBean EBAX	-750	-9	-150	-9	AG	1810	1.6	.0	13.5
R. McBean EBDX	150	-9	750	-9	AG	2136	1.6	.0	11.8
S. McBean WBAX	750	12	150	12	AG	1637	1.6	.0	13.5
T. McBean WBDX	-150	12	-750	12	AG	1169	1.6	.0	11.8

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.3	.2	.0	.0	.0	.2	.0	.5	.1
2. NW	172.	1.4	.2	.0	.1	.0	.6	.0	.1	.0
3. SW	77.	1.4	.2	.0	.0	.0	.4	.0	.0	.4
4. NE	188.	1.2	.4	.0	.0	.0	.3	.0	.0	.1
5. ES mdblk	278.	.9	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	99.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	1.0	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	257.	.8	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	348.	1.1	.5	.0	.1	.0	.3	.0	.0	.0
10. NW mdblk	175.	.7	.0	.0	.0	.2	.1	.0	.0	.0
11. SW mdblk	12.	1.3	.2	.0	.1	.0	.8	.0	.0	.0
12. NE mdblk	185.	.6	.0	.0	.0	.0	.1	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	262.	.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	183.	.3	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.1	.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	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.4	.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	.5	.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: Henry Mayo Hospital General Plan
RUN: 2018wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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. Wiley Cy NBA	9	-150	9	0	AG	570	3.1	.0	13.5
B. Wiley Cy NBD	9	0	9	150	AG	1040	3.2	.0	10.0
C. Wiley Cy NBL	5	-150	0	0	AG	230	3.3	.0	10.0
D. Wiley Cy SBA	-9	150	-9	0	AG	820	3.3	.0	13.5
E. Wiley Cy SBD	-9	0	-9	-150	AG	850	2.8	.0	10.0
F. Wiley Cy SBL	-5	150	0	0	AG	130	3.2	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1510	2.9	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1620	2.0	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	510	3.3	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1220	2.5	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1670	1.8	.0	11.8
L. Lyons WBL	150	5	0	0	AG	190	3.2	.0	10.0
M. Wiley C NBAX	9	-750	9	-150	AG	800	1.7	.0	13.5
N. Wiley C NBDX	9	150	9	750	AG	1040	1.7	.0	10.0
O. Wiley C SBAX	-9	750	-9	150	AG	950	1.7	.0	13.5
P. Wiley C SBDX	-9	-150	-9	-750	AG	850	1.7	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	2020	1.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1620	1.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1410	1.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1670	1.6	.0	11.8

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.1	.1	.0	.0	.0	.0	.0	.5	.1
2. NW	98.	1.0	.0	.1	.0	.2	.0	.0	.0	.0
3. SW	8.	1.1	.0	.1	.0	.3	.1	.0	.3	.0
4. NE	257.	1.1	.0	.2	.0	.0	.0	.0	.2	.0
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	99.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	1.0	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.7	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	7.	.7	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	189.	.8	.0	.5	.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.	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tourneme NBA	2	-150	2	0	AG	40	2.9	.0	10.0
B. Tourneme NBD	2	0	2	150	AG	410	2.8	.0	10.0
C. Tourneme NBL	2	-150	0	0	AG	60	3.2	.0	10.0
D. Tourneme SBA	-4	150	-4	0	AG	200	2.9	.0	10.0
E. Tourneme SBD	-4	0	-4	-150	AG	60	2.0	.0	10.0
F. Tourneme SBL	-2	150	0	0	AG	380	3.4	.0	10.0
G. Wiley Cy EBA	-150	-7	0	-7	AG	670	2.5	.0	10.0
H. Wiley Cy EBD	0	-7	150	-7	AG	1060	1.9	.0	10.0
I. Wiley Cy EBL	-150	-5	0	0	AG	260	3.3	.0	10.0
J. Wiley Cy WBA	150	7	0	7	AG	660	2.5	.0	10.0
K. Wiley Cy WBD	0	7	-150	7	AG	770	1.8	.0	10.0
L. Wiley Cy WBL	150	5	0	0	AG	30	3.2	.0	10.0
M. Tournem NBAX	2	-750	2	-150	AG	100	1.7	.0	10.0
N. Tournem NBDX	2	150	2	750	AG	410	1.7	.0	10.0
O. Tournem SBAX	-4	750	-4	150	AG	580	1.7	.0	10.0
P. Tournem SBDX	-4	-150	-4	-750	AG	60	1.7	.0	10.0
Q. Wiley C EBAX	-750	-7	-150	-7	AG	930	1.7	.0	10.0
R. Wiley C EBDX	150	-7	750	-7	AG	1060	1.7	.0	10.0
S. Wiley C WBAX	750	7	150	7	AG	690	1.7	.0	10.0
T. Wiley C WBDX	-150	7	-750	7	AG	770	1.7	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-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: Henry Mayo Hospital General Plan
RUN: 2018wP-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	353.	.6	.0	.2	.0	.0	.0	.2	.0	.1
2. NW	98.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	8.	.6	.0	.1	.0	.0	.0	.1	.1	.0
4. NE	261.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.5	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.4	.0	.1	.0	.0	.0	.2	.0	.0
11. SW mdblk	3.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.5	.0	.2	.0	.0	.0	.1	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	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	357.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	3.	.1	.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: Henry Mayo Hospital General Plan
RUN: 2018wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

RECEPTOR	*	I	J	K	L	M	N	O	P	Q	R	S	T
						CONC/LINK (PPM)							
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.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	.3	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.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: Henry Mayo Hospital General Plan
RUN: 2018wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Orchard NBA	9	-150	9	0	AG	300	2.9	.0	13.5
B. Orchard NBD	9	0	9	150	AG	1040	3.2	.0	10.0
C. Orchard NBL	5	-150	0	0	AG	90	3.2	.0	10.0
D. Orchard SBA	-11	150	-11	0	AG	370	3.2	.0	10.0
E. Orchard SBD	-11	0	-11	-150	AG	380	2.2	.0	10.0
F. Orchard SBL	-9	150	0	0	AG	560	3.3	.0	10.0
G. Lyons EBA	-150	-12	0	-12	AG	1130	2.6	.0	13.5
H. Lyons EBD	0	-12	150	-12	AG	1740	2.0	.0	10.0
I. Lyons EBL	-150	-9	0	0	AG	530	3.3	.0	10.0
J. Lyons WBA	150	9	0	9	AG	1710	3.2	.0	13.5
K. Lyons WBD	0	9	-150	9	AG	1660	2.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	130	3.2	.0	10.0
M. Orchard NBAX	9	-750	9	-150	AG	390	1.7	.0	13.5
N. Orchard NBDX	9	150	9	750	AG	1040	1.7	.0	10.0
O. Orchard SBAX	-11	750	-11	150	AG	930	1.7	.0	10.0
P. Orchard SBDX	-11	-150	-11	-750	AG	380	1.7	.0	10.0
Q. Lyons EBAX	-750	-12	-150	-12	AG	1660	1.6	.0	13.5
R. Lyons EBDX	150	-12	750	-12	AG	1740	1.6	.0	10.0
S. Lyons WBAX	750	9	150	9	AG	1840	1.6	.0	13.5
T. Lyons WBDX	-150	9	-750	9	AG	1660	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.0	.0	.3	.0	.0	.0	.1	.0	.2
2. NW	97.	1.2	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	79.	.8	.0	.0	.0	.0	.0	.0	.1	.3
4. NE	257.	1.1	.0	.2	.0	.0	.0	.0	.1	.0
5. ES mdblk	280.	.9	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.9	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	.9	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.5	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	167.	.7	.0	.1	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.5	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	190.	.8	.0	.5	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.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	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
      U=    .5 M/S             Z0= 100. CM           ALT=   373. (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. Newhall NBA	9	-150	9	0	AG	160	2.9	.0	10.0
B. Newhall NBD	9	0	9	150	AG	120	2.0	.0	10.0
C. Newhall NBL	9	-150	0	0	AG	480	3.3	.0	10.0
D. Newhall SBA	-7	150	-7	0	AG	250	2.9	.0	10.0
E. Newhall SBD	-7	0	-7	-150	AG	790	2.2	.0	10.0
F. Newhall SBL	-5	150	0	0	AG	30	3.2	.0	10.0
G. Lyons EBA	-150	-9	0	-9	AG	1730	3.2	.0	13.5
H. Lyons EBD	0	-9	150	-9	AG	1280	1.8	.0	10.0
I. Lyons EBL	-150	-5	0	0	AG	10	3.2	.0	10.0
J. Lyons WBA	150	7	0	7	AG	1210	2.7	.0	10.0
K. Lyons WBD	0	7	-150	7	AG	1770	2.0	.0	10.0
L. Lyons WBL	150	5	0	0	AG	90	3.2	.0	10.0
M. Newhall NBAX	9	-750	9	-150	AG	640	1.7	.0	10.0
N. Newhall NBDX	9	150	9	750	AG	120	1.7	.0	10.0
O. Newhall SBAX	-7	750	-7	150	AG	280	1.7	.0	10.0
P. Newhall SBDX	-7	-150	-7	-750	AG	790	1.7	.0	10.0
Q. Lyons EBAX	-750	-9	-150	-9	AG	1740	1.6	.0	13.5
R. Lyons EBDX	150	-9	750	-9	AG	1280	1.6	.0	10.0
S. Lyons WBAX	750	7	150	7	AG	1300	1.6	.0	10.0
T. Lyons WBDX	-150	7	-750	7	AG	1770	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

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

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

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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.	1.1	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	171.	.9	.0	.0	.1	.0	.2	.0	.2	.0
3. SW	279.	.9	.0	.0	.0	.0	.0	.0	.7	.0
4. NE	261.	.8	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	100.	.8	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	81.	1.0	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	348.	.5	.0	.0	.2	.0	.0	.0	.0	.0
10. NW mdblk	175.	.4	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	9.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.7	.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.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.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: Henry Mayo Hospital General Plan
RUN: 2018wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

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

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.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	.1	.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	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.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	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.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	.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: Henry Mayo Hospital General Plan
RUN: 2018wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
     U=    .5 M/S            Z0= 100. CM           ALT=   373. (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	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valencia NBA	9	-150	9	0	AG	2200	2.9	.0	13.5
B. Valencia NBD	9	0	9	150	AG	2830	2.4	.0	11.8
C. Valencia NBL	5	-150	0	0	AG	110	3.2	.0	10.0
D. Valencia SBA	-12	150	-12	0	AG	1520	2.6	.0	20.5
E. Valencia SBD	-12	0	-12	-150	AG	1460	1.7	.0	13.5
F. Valencia SBL	-5	150	0	0	AG	120	3.2	.0	10.0
G. Magic Mt EBA	-150	-11	0	-11	AG	900	3.3	.0	10.0
H. Magic Mt EBD	0	-11	150	-11	AG	1740	3.4	.0	10.0
I. Magic Mt EBL	-150	-9	0	0	AG	1080	3.4	.0	10.0
J. Magic Mt WBA	150	9	0	9	AG	910	3.3	.0	13.5
K. Magic Mt WBD	0	9	-150	9	AG	1360	3.3	.0	10.0
L. Magic Mt WBL	150	5	0	0	AG	550	3.4	.0	10.0
M. Valenci NBAX	9	-750	9	-150	AG	2310	1.6	.0	13.5
N. Valenci NBDX	9	150	9	750	AG	2830	1.6	.0	11.8
O. Valenci SBAX	-12	750	-12	150	AG	1640	1.6	.0	20.5
P. Valenci SBDX	-12	-150	-12	-750	AG	1460	1.6	.0	13.5
Q. Magic M EBAX	-750	-11	-150	-11	AG	1980	1.6	.0	10.0
R. Magic M EBDX	150	-11	750	-11	AG	1740	1.6	.0	10.0
S. Magic M WBAX	750	9	150	9	AG	1460	1.6	.0	13.5
T. Magic M WBDX	-150	9	-750	9	AG	1360	1.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-17	1.8
2. NW	-24	15	1.8
3. SW	-21	-17	1.8
4. NE	16	17	1.8
5. ES mdblk	150	-17	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-24	150	1.8
11. SW mdblk	-21	-150	1.8
12. NE mdblk	16	150	1.8
13. ES blk	600	-17	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	17	-600	1.8
18. NW blk	-24	600	1.8
19. SW blk	-21	-600	1.8
20. NE blk	16	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
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JOB: Henry Mayo Hospital General Plan
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IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.6	.2	.6	.0	.1	.0	.0	.0	.4
2. NW	103.	1.4	.0	.2	.0	.2	.0	.0	.0	.2
3. SW	81.	1.3	.2	.0	.0	.0	.2	.0	.1	.5
4. NE	257.	1.5	.0	.4	.0	.1	.0	.0	.1	.0
5. ES mdblk	278.	1.3	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	99.	1.2	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	80.	1.3	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	261.	1.0	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	1.3	.8	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.9	.1	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	9.	.9	.1	.1	.0	.0	.3	.0	.0	.0
12. NE mdblk	189.	1.3	.0	.8	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.9	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
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JOB: Henry Mayo Hospital General Plan
RUN: 2018wP-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	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.2	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	.0	.0	.0	.0	.5	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.1	.0	.0	.0	.0	.0

APPENDIX D

GREENHOUSE GAS EMISSIONS WORKSHEETS

Greenhouse Gas Emissions Worksheet

Project Parameters	
	2012
Vehicles (trips/day)	18,734
Electricity from power company (MWh/year)	10,393
Natural Gas burned (cf/day)	63,930

	Emissions (tons per year)			
Emission Source	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Vehicles	25,000	9.7	2.7	26,000
Electricity Production	3,200	0.035	0.019	3,200
Natural Gas Combustion	1400	0.027	0.026	1,400
Total Annual Emissions	29,600	9.8	2.7	30,600

Emission Source	**Total CO_2e (Tg per year)**
Vehicles	0.0236
Electricity Production	0.0029
Natural Gas Combustion	0.0013
Total (CO_2e)	0.0278
% of SCAG 2004 total	0.016%
% of CA 2004 total	0.0056%

1.1025 tons/metric tonne
1,000,000 metric tonne/Tg

SCAG total = 176.79 Tg/year
CA total = 492 Tg/year

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents.

The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2001, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e.)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	21
Nitrous Oxide	120	310
HFC-23	264	11700
HFC-134a	14.6	1300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CF_4)	50000	6500
PFC: Hexafluoromethane (C_2F_6)	10000	9200
Sulfur Hexafluoride (SF_6)	3200	23900

Global Climate Change Emissions Factors

Building Area (square feet)	
Existing Medical buildings	335,169
New Medical buildings	335,363

Natural Gas usage rate	2.9 cf/sf/mo	(from URBEMIS)
	30.417	avg days/mo
Natural Gas Combustion (cf/day)	63,930	

Electricity usage rate	15.5 kwh/sf/yr
	(from http://www.eia.doe.gov/emeu/cbecs/pba99/mercantile/mercantileconstable.html)
Electricity used (kWH/year)	10,393,246

	CO_2	CH_4	N_2O	
Natural gas combustion	lb/10^6 scf	lb/10^6 scf	lb/10^6 scf	
	120,000	2.3	2.2	(from from EPA AP-42 Vol I:Chapter 1.4, Table :
Electricity production	lb/kWh	lb/MWh	lb/MWh	
	0.61	0.0067	0.0037	(from http://www.eia.doe.gov/oiaf/1605/e-factor.l

Vehicles

speed=	40	(mph)	avg trip length=	10	(miles)
2012		**CO_2**	**CH_4**	**N_2O**	**Fleet %**
LDA	CAT	290.766	0.132	0.032	61.3%
LDA	DSL	360.646	0.001	0.001	0.5%
LDT	CAT	364.476	0.13	0.042	34.3%
LDT	DSL	349.2165	0.002	0.002	0.4%
HDT	CAT	468.0562	0.179	0.088	1.8%
HDT	DSL	930.5006	0.006	0.005	1.7%
Composite		330.710	0.129	0.036	100.0%

CO_2 from EMFAC2007

Both CH_4 and N_2O from EPA *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles* , November 2004, Table 28.

Fleet percentages from URBEMIS2007