Appendix B1 Air Quality Data (Granada Hills–Knollwood)

Granada Hills - Knollwood Assumptions & Calculations

Granada Hills - Knollwood
Assumptions

CalEEMod

Project Characteristics:

Project Name:	Granada Hills Existing Conditions		(GHExist.xls)
	Granada Hills Proposed Plan		(GH2030all.xls)
	Granada Hills - 2030 Res Growth		(GH2030Res.xls)
	Granada Hills - 2030 Com Growth		(GH2030Com.xls)
	Granada Hills - 2030 Ind Growth		(GH2030Ind.xls)
Project Location:	County - Los Angeles (SC)		
windspeed (m/s)	2.2	default	
precipitation (days)	33	default	
Climate zone	11		
Landuse Setting	Urban		
Operational Year	2005/2030		
Utility Company	LADWP	default emission factors for operational year	

Land Use Types:

Project Sheet	CalEEMod category
Single Family	Single Family
Multi-Family	Apartment low rise
Commercial	1/2 as Strip Mall Retail
	1/2 as General Office Building
	*Includes open space building square footages and acerages
Industrial	Manufacturing

Construction: No construction

Operational:

Mobile:	Trip Rates left as program default			
	Vehicle Emissions left as default			
	Road Dust left as default			
Area:	Hearths (2005):	Woodstove use:	Apartment -	# catalytic 161.3, # non-catalytic 161.3 (program Default)
			SF -	# catalytic 799.35, # non-catalytic 799.35 (program default)
		Fireplaces:	Apartment -	# wood 161.3, # gas - 2742.1, # No Fireplace - 322.6 (program default)
			SF -	# wood 799.35, #gas - 13588.95, # no fireplace - 1598.7 (prgram default)
	Hearths (2030 All):	Woodstove use:	Apartment -	# catalytic 189.7, # non-catalytic 189.7 (program Default)
			SF -	# catalytic 954.45, # non-catalytic 954.45 (program default)
		Fireplaces:	Apartment -	# wood 161.3, # gas - 3253.3, # No Fireplace - 379.4 (program default)
			SF -	# wood 799.35, #gas - 16380.75, # no fireplace - 1908.9(prgram default)
	Consumer Products:	Program Default		
	Architectural Coating:	Program Default		
	Landscape Equip:	Program Default		
Energy Use:	2005: Used Historic Data Defaults			
	2030: Program Defaults			

Granada Hills - Knollwood
Assumptions

Water/Waste water:	Program Defaults
Solid Waste:	Program Defaults
Vegetation	Ignored

Mitigation:

2005: No mitigation implemented

2030: TIMP Reduction

0.7687%	% reduction
371390	w/o
368535	w

Others as indicated on calculation sheets

Granada Hills - Knollwood
Criteria Pollutants

Unmitigated (lbs/day)

	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Existing						
Winter						
Area	3,010	328	8,315	17	1,041	1,040
Mobile	2,438	5,346	23,018	36	1,997	223
Total	5,448	5,674	31,333	52	3,038	1,264
2030						
Area	3,552	373	9,590	20	1,240	1,240
Mobile	786	1,818	6,027	22	2,602	142
Total	4,339	2,190	15,617	42	3,842	1,381
Growth						
Area	542	45	1,275	3	199	199
Mobile	(1,651)	(3,528)	(16,991)	(13)	605	(82)
Total	(1,109)	(3,484)	(15,715)	(10)	804	117
SCAQMD Thresholds	55	55	550		150	55
Significant?	**No**	**No**	**No**		**Yes**	**Yes**

Mitigated (lbs/day)

	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Existing					
Area	3,010	328	8,315	1,041	1,040
Mobile	2,438	5,346	23,018	1,997	223
Total	5,448	5,674	31,333	3,038	1,264
Total 2030 Mitigated					
Area	3,552	373	9,590	1,240	1,240
Mobile	786	1,818	6,027	2,422	132
Total	4,339	2,190	15,617	3,662	1,371
2030 Growth					
Area	542	45	1,275	199	199
Mobile	(1,651)	(3,528)	(16,991)	425	(91)
Total	(1,109)	(3,484)	(15,715)	624	108
SCAQMD Thresholds	55	55	550	150	55
Significant?	**No**	**No**	**No**	**Yes**	**Yes**

Reductions:

Reduction in VMT from Growth:	32.11%
Growth is X% of 2030 Total:	20.93%
Reduction in VMT from 2030 total:	6.72%
% of Fleet that are Heavy Duty Diesel Trucks:	1.90%
% Emission HDT:	10.89%
Reduction in VMT from DPM Filter:	0.21%
Total reduction in Mobile PM:	6.93%

Granada Hills NCP
CO Hotspot Analysis

CO Results (Existing 2005)

Intersection	LOS	Peak Vehicle Volume	1-hour CO Project Concentration, ppm	1-hour CO Background Concentration , ppm	1-hour CO Total Concentration , ppm	8-hour CO Project Concentration , ppm	8-hour CO Background Concentration , ppm	8-hour CO Total Concentration , ppm	1-hour CO Limit, ppm	8-hour CO Limit, ppm
Zelzah Ave / Rinaldi	F	1,633	2.0	4.0	**6.0**	1.4	2.8	**4.2**	20	9
Balboa Blvd / Balboa Rd	F	3,506	3.4	4.0	**7.4**	2.4	2.8	**5.2**	20	9
Balboa Blvd / Senson	F	3,518	3.3	4.0	**7.3**	2.3	2.8	**5.1**	20	9
Balboa Blvd / Rinaldi	F	4,543	4.3	4.0	**8.3**	3.0	2.8	**5.8**	20	9
Balboa Blvd / Pineridge	E	4,316	4.3	4.0	**8.3**	3.0	2.8	**5.8**	20	9
Balboa Blvd / Knollwood	E	4,277	4.6	4.0	**8.6**	3.2	2.8	**6.0**	20	9
Balboa Blvd / Woodley	E	3,573	3.6	4.0	**7.6**	2.5	2.8	**5.3**	20	9
Hayvenhurst / Index	D	2,124	2.1	4.0	**6.1**	1.5	2.8	**4.3**	20	9
Balboa / Lassen	D	5,346	4.8	4.0	**8.8**	3.4	2.8	**6.2**	20	9
Hayvenhurst / Lassen	D	2,818	2.3	4.0	**6.3**	1.6	2.8	**4.4**	20	9

CO Results (Buildout 2030)

Intersection	LOS	Peak Vehicle Volume	1-hour CO Project Concentration, ppm	1-hour CO Background Concentration , ppm	1-hour CO Total Concentration , ppm	8-hour CO Project Concentration , ppm	8-hour CO Background Concentration , ppm	8-hour CO Total Concentration , ppm	1-hour CO Limit, ppm	8-hour CO Limit, ppm
Balboa Blvd / Balboa Road	F	6,510	0.8	4.0	**4.8**	0.6	2.8	**3.4**	20	9
Balboa Blvd / Senson Blvd	F	6,117	0.8	4.0	**4.8**	0.6	2.8	**3.4**	20	9
Balboa Blvd / Woodley	F	6,050	0.8	4.0	**4.8**	0.6	2.8	**3.4**	20	9
Zelzah / Chatsworth	F	4,210	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9
Balboa Blvd / Rinaldi	F	7,949	0.9	4.0	**4.9**	0.6	2.8	**3.4**	20	9
Balboa Blvd / Index	F	4,296	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9
Balboa Blvd / San Fern. Mission	F	5,573	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9
Balboa Blvd / Chatsworth	F	5,122	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9
Balboa Blvd / Devonshire	F	4,956	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9
Woodley Avenue / Chatsworth	F	4,332	0.6	4.0	**4.6**	0.4	2.8	**3.2**	20	9

Granada Hills - Knollwood CO 2005 Output

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

JOB: Zelzah Ave & Rinaldi PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	10	0	10	600	AG	44	6.5	.0	12.8
B. NB Approach	10	600	10	755	AG	33	11.6	.0	12.8
C. NB Depart	10	755	10	910	AG	349	11.6	.0	12.8
D. NB External	10	910	10	1510	AG	349	6.5	.0	12.8
E. NB Left 11	10	600	5	755	AG	11	11.6	.0	12.8
F. SB Left 71	0	910	5	755	AG	71	11.6	.0	12.8
G. SB External	0	1510	0	910	AG	284	6.5	.0	12.8
H. SB Approach	0	910	0	755	AG	213	11.6	.0	12.8
I. SB Depart	0	755	0	600	AG	469	11.6	.0	12.8
J. SB External	0	600	0	0	AG	469	6.5	.0	12.8
K. EB External	-750	750	-150	750	AG	982	6.5	.0	12.8
L. EB Approach	-150	750	5	750	AG	736	11.6	.0	12.8
M. EB Depart	5	750	160	750	AG	572	11.6	.0	12.8
N. EB External	160	750	760	750	AG	572	6.5	.0	12.8
O. WB External	760	760	160	760	AG	323	6.5	.0	12.8
P. WB Approach	160	760	5	760	AG	242	11.6	.0	12.8
Q. WB Depart	5	760	-150	760	AG	243	11.6	.0	12.8
R. WB External	-150	760	-750	760	AG	243	6.5	.0	12.8
S. EB Left 24	-150	750	5	755	AG	246	11.6	.0	12.8
T. WB Left 81	160	760	5	755	AG	81	11.6	.0	12.8

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

JOB: Zelzah Ave & Rinaldi PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	13	747	2.0
3. Receptor	13	763	2.0
4. Receptor	-3	763	2.0

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. Receptor	88.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	272.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	265.	1.5	.0	.0	.1	.0	.0	.0	.0	.0
4. Receptor	179.	1.4	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.1	.0	.0	.2	.8	.2	.1	.0	.0	.0	.0	.0
2. Receptor	.2	.0	.2	1.0	.1	.0	.0	.0	.0	.0	.3	.0
3. Receptor	.0	.0	.2	.4	.0	.0	.0	.0	.3	.0	.3	.0
4. Receptor	.7	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0

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

               JOB: Balboa Blvd & Balboa Rd PM 2005
               RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=   1.0 M/S             Z0= 100. CM            ALT=   396. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M               AMB=   .0 PPM
     SIGTH=    5. DEGREES        TEMP=  4.4 DEGREE (C)


 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*-----------------------------
A. NB External  *    16     0    16   600 *  AG   2236   6.5     .0  18.9
B. NB Approach  *    16   600    16   757 *  AG   1491  11.6     .0  18.9
C. NB Depart    *    16   757    16   914 *  AG   2033  11.6     .0  18.9
D. NB External  *    16   914    16  1514 *  AG   2033   6.5     .0  18.9
E. NB Left   74 *    16   600     8   757 *  AG    745  11.6     .0  18.9
F. SB Left   0  *     0   914     8   757 *  AG      0  11.6     .0  18.9
G. SB External  *     0  1514     0   914 *  AG    187   6.5     .0  18.9
H. SB Approach  *     0   914     0   757 *  AG    187  11.6     .0  18.9
I. SB Depart    *     0   757     0   600 *  AG    666  11.6     .0  18.9
J. SB External  *     0   600     0     0 *  AG    666   6.5     .0  18.9
K. EB External  *  -750   750  -150   750 *  AG   1083   6.5     .0  16.7
L. EB Approach  *  -150   750     8   750 *  AG    541  11.6     .0  16.7
M. EB Depart    *     8   750   166   750 *  AG      0  11.6     .0  16.7
N. EB External  *   166   750   766   750 *  AG      0   6.5     .0  16.7
O. WB External  *   766   764   166   764 *  AG      0   6.5     .0  16.7
P. WB Approach  *   166   764     8   764 *  AG      0  11.6     .0  16.7
Q. WB Depart    *     8   764  -150   764 *  AG    807  11.6     .0  16.7
R. WB External  *  -150   764  -750   764 *  AG    807   6.5     .0  16.7
S. EB Left   54 *  -150   750     8   757 *  AG    542  11.6     .0  16.7
T. WB Left   0  *   166   764     8   757 *  AG      0  11.6     .0  16.7
```

□□

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

               JOB: Balboa Blvd & Balboa Rd PM 2005
               RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. Receptor *     -3    747   2.0
2. Receptor *     19    747   2.0
3. Receptor *     19    767   2.0
4. Receptor *     -3    767   2.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
------------*-------*-------*-----------------------------------------
1. Receptor *  171. *   2.2 *   .2   .6   .0   .0   .6   .0   .0   .0
2. Receptor *  359. *   3.0 *   .0   .3  2.1   .5   .0   .0   .0   .0
3. Receptor *  182. *   3.4 *   .5  1.6   .4   .0   .6   .0   .0   .0
4. Receptor *  173. *   2.8 *   .3   .6   .0   .0   .7   .0   .0   .0


            *                        CONC/LINK
            *                          (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-----------------------------------------------------------
1. Receptor *   .7   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. Receptor *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
3. Receptor *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
4. Receptor *   .6   .0   .0   .2   .0   .0   .0   .0   .2   .0   .2   .0
```

□□

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

JOB: Balboa Blvd & Knollwood PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S	Z0= 100. CM	ALT= 396. (M)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 4.4 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	2791	6.5	.0	18.9
B. NB Approach	16	600	16	755	AG	2791	11.6	.0	18.9
C. NB Depart	16	755	16	910	AG	1878	11.6	.0	18.9
D. NB External	16	910	16	1510	AG	1878	6.5	.0	18.9
E. NB Left 0	16	600	8	755	AG	0	11.6	.0	18.9
F. SB Left 48	0	910	8	755	AG	484	11.6	.0	18.9
G. SB External	0	1510	0	910	AG	1451	6.5	.0	18.9
H. SB Approach	0	910	0	755	AG	967	11.6	.0	18.9
I. SB Depart	0	755	0	600	AG	985	11.6	.0	18.9
J. SB External	0	600	0	0	AG	985	6.5	.0	18.9
K. EB External	-750	750	-150	750	AG	0	6.5	.0	12.8
L. EB Approach	-150	750	8	750	AG	0	11.6	.0	12.8
M. EB Depart	8	750	166	750	AG	1414	11.6	.0	12.8
N. EB External	166	750	766	750	AG	1414	6.5	.0	12.8
O. WB External	766	760	166	760	AG	35	6.5	.0	12.8
P. WB Approach	166	760	8	760	AG	17	11.6	.0	12.8
Q. WB Depart	8	760	-150	760	AG	0	11.6	.0	12.8
R. WB External	-150	760	-750	760	AG	0	6.5	.0	12.8
S. EB Left 0	-150	750	8	755	AG	0	11.6	.0	12.8
T. WB Left 18	166	760	8	755	AG	18	11.6	.0	12.8

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

JOB: Balboa Blvd & Knollwood PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	763	2.0
4. Receptor	-3	763	2.0

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. Receptor	89.	3.2	.0	.8	.0	.0	.0	.0	.0	.0
2. Receptor	357.	4.0	.0	.4	2.0	.3	.0	.2	.4	.1
3. Receptor	182.	4.6	.6	2.9	.3	.0	.0	.0	.0	.0
4. Receptor	4.	2.7	.0	.0	.3	.5	.0	.5	.2	1.2

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.3	.0	.0	.0	1.7	.3	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.2	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: Balboa & Lassen PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	2965	6.5	.0	18.9
B. NB Approach	16	600	16	757	AG	2224	11.6	.0	18.9
C. NB Depart	16	757	16	914	AG	1857	11.6	.0	18.9
D. NB External	16	914	16	1514	AG	1857	6.5	.0	18.9
E. NB Left 74	16	600	8	757	AG	741	11.6	.0	18.9
F. SB Left 22	0	914	8	757	AG	221	11.6	.0	18.9
G. SB External	0	1514	0	914	AG	884	6.5	.0	18.9
H. SB Approach	0	914	0	757	AG	663	11.6	.0	18.9
I. SB Depart	0	757	0	600	AG	816	11.6	.0	18.9
J. SB External	0	600	0	0	AG	816	6.5	.0	18.9
K. EB External	-750	750	-150	750	AG	797	6.5	.0	16.7
L. EB Approach	-150	750	8	750	AG	598	11.6	.0	16.7
M. EB Depart	8	750	166	750	AG	1361	11.6	.0	16.7
N. EB External	166	750	766	750	AG	1361	6.5	.0	16.7
O. WB External	766	764	166	764	AG	700	6.5	.0	16.7
P. WB Approach	166	764	8	764	AG	525	11.6	.0	16.7
Q. WB Depart	8	764	-150	764	AG	1312	11.6	.0	16.7
R. WB External	-150	764	-750	764	AG	1312	6.5	.0	16.7
S. EB Left 19	-150	750	8	757	AG	199	11.6	.0	16.7
T. WB Left 17	166	764	8	757	AG	175	11.6	.0	16.7

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

JOB: Balboa & Lassen PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	767	2.0
4. Receptor	-3	767	2.0

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. Receptor	88.	3.5	.0	.7	.0	.0	.3	.0	.0	.0
2. Receptor	358.	3.8	.0	.4	2.0	.4	.0	.0	.2	.0
3. Receptor	182.	4.8	.6	2.3	.4	.0	.6	.0	.0	.0
4. Receptor	172.	3.4	.3	.9	.0	.0	.7	.0	.0	.1

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.2	.0	.0	.2	1.6	.3	.2	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.4	.0	.0	.2	.0	.0	.0	.0
3. Receptor	.0	.2	.0	.0	.4	.0	.0	.1	.0	.0	.0	.0
4. Receptor	.7	.0	.0	.2	.0	.0	.0	.0	.4	.0	.0	.0

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

JOB: Balboa Blvd & Pineridge PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	2791	6.5	.0	18.9
B. NB Approach	*	16	600	16	755	* AG	2093	11.6	.0	18.9
C. NB Depart	*	16	755	16	910	* AG	1497	11.6	.0	18.9
D. NB External	*	16	910	16	1510	* AG	1497	6.5	.0	18.9
E. NB Left 69	*	16	600	8	755	* AG	698	11.6	.0	18.9
F. SB Left 27	*	0	910	8	755	* AG	279	11.6	.0	18.9
G. SB External	*	0	1510	0	910	* AG	1117	6.5	.0	18.9
H. SB Approach	*	0	910	0	755	* AG	838	11.6	.0	18.9
I. SB Depart	*	0	755	0	600	* AG	661	11.6	.0	18.9
J. SB External	*	0	600	0	0	* AG	661	6.5	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	276	6.5	.0	12.8
L. EB Approach	*	-150	750	8	750	* AG	207	11.6	.0	12.8
M. EB Depart	*	8	750	166	750	* AG	1115	11.6	.0	12.8
N. EB External	*	166	750	766	750	* AG	1115	6.5	.0	12.8
O. WB External	*	766	760	166	760	* AG	132	6.5	.0	12.8
P. WB Approach	*	166	760	8	760	* AG	99	11.6	.0	12.8
Q. WB Depart	*	8	760	-150	760	* AG	1043	11.6	.0	12.8
R. WB External	*	-150	760	-750	760	* AG	1043	6.5	.0	12.8
S. EB Left 69	*	-150	750	8	755	* AG	69	11.6	.0	12.8
T. WB Left 33	*	166	760	8	755	* AG	33	11.6	.0	12.8

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

JOB: Balboa Blvd & Pineridge PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	763	2.0
4. Receptor	*	-3	763	2.0

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. Receptor	* 88.	* 2.9	*	.0	.6	.0	.0	.3	.0	.0	.0
2. Receptor	* 357.	* 3.2	*	.0	.3	1.6	.3	.0	.1	.3	.1
3. Receptor	* 182.	* 4.3	*	.6	2.3	.2	.0	.6	.0	.0	.0
4. Receptor	* 172.	* 3.0	*	.3	.8	.0	.0	.7	.0	.0	.1

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.2	.0	.0	.0	1.4	.3	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.2	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.6	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0

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

JOB: Balboa Blvd & Rinaldi PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	2692	6.5	.0	18.9
B. NB Approach	16	600	16	755	AG	2019	11.6	.0	18.9
C. NB Depart	16	755	16	910	AG	1448	11.6	.0	18.9
D. NB External	16	910	16	1510	AG	1448	6.5	.0	18.9
E. NB Left 67	16	600	8	755	AG	673	11.6	.0	18.9
F. SB Left 36	0	910	8	755	AG	361	11.6	.0	18.9
G. SB External	0	1510	0	910	AG	1444	6.5	.0	18.9
H. SB Approach	0	910	0	755	AG	1083	11.6	.0	18.9
I. SB Depart	0	755	0	600	AG	824	11.6	.0	18.9
J. SB External	0	600	0	0	AG	824	6.5	.0	18.9
K. EB External	-750	750	-150	750	AG	120	6.5	.0	12.8
L. EB Approach	-150	750	8	750	AG	90	11.6	.0	12.8
M. EB Depart	8	750	166	750	AG	1094	11.6	.0	12.8
N. EB External	166	750	766	750	AG	1094	6.5	.0	12.8
O. WB External	766	760	166	760	AG	287	6.5	.0	12.8
P. WB Approach	166	760	8	760	AG	215	11.6	.0	12.8
Q. WB Depart	8	760	-150	760	AG	1177	11.6	.0	12.8
R. WB External	-150	760	-750	760	AG	1177	6.5	.0	12.8
S. EB Left 30	-150	750	8	755	AG	30	11.6	.0	12.8
T. WB Left 72	166	760	8	755	AG	72	11.6	.0	12.8

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

JOB: Balboa Blvd & Rinaldi PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	763	2.0
4. Receptor	-3	763	2.0

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. Receptor	88.	3.0	.0	.6	.0	.0	.3	.0	.0	.0
2. Receptor	357.	3.3	.0	.3	1.6	.3	.0	.2	.4	.1
3. Receptor	182.	4.3	.6	2.2	.2	.0	.6	.0	.0	.0
4. Receptor	172.	3.1	.3	.8	.0	.0	.6	.0	.0	.2

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.2	.0	.0	.0	1.4	.3	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.2	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.8	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0

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

JOB: Balboa Blvd & Senson PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0= 100. CM	ALT= 396. (M)
BRG=	WORST CASE	VD= .0 CM/S	
CLAS=	7 (G)	VS= .0 CM/S	
MIXH=	1000. M	AMB= .0 PPM	
SIGTH=	5. DEGREES	TEMP= 4.4 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	2236	6.5	.0	18.9
B. NB Approach	16	600	16	758	AG	1491	11.6	.0	18.9
C. NB Depart	16	758	16	916	AG	1505	11.6	.0	18.9
D. NB External	16	916	16	1516	AG	1505	6.5	.0	18.9
E. NB Left 74	16	600	8	758	AG	745	11.6	.0	18.9
F. SB Left 0	0	916	8	758	AG	0	11.6	.0	18.9
G. SB External	0	1516	0	916	AG	1254	6.5	.0	18.9
H. SB Approach	0	916	0	758	AG	1254	11.6	.0	18.9
I. SB Depart	0	758	0	600	AG	850	11.6	.0	18.9
J. SB External	0	600	0	0	AG	850	6.5	.0	18.9
K. EB External	-750	750	-150	750	AG	28	6.5	.0	18.9
L. EB Approach	-150	750	8	750	AG	14	11.6	.0	18.9
M. EB Depart	8	750	166	750	AG	0	11.6	.0	18.9
N. EB External	166	750	766	750	AG	0	6.5	.0	18.9
O. WB External	766	766	166	766	AG	0	6.5	.0	18.9
P. WB Approach	166	766	8	766	AG	0	11.6	.0	18.9
Q. WB Depart	8	766	-150	766	AG	1163	11.6	.0	18.9
R. WB External	-150	766	-750	766	AG	1163	6.5	.0	18.9
S. EB Left 14	-150	750	8	758	AG	14	11.6	.0	18.9
T. WB Left 0	166	766	8	758	AG	0	11.6	.0	18.9

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

JOB: Balboa Blvd & Senson PM 2005
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	769	2.0
4. Receptor	-3	769	2.0

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. Receptor	3.	2.7	.0	.0	.2	.4	.0	.0	.2	1.3
2. Receptor	358.	2.7	.0	.3	1.6	.4	.0	.0	.3	.1
3. Receptor	182.	3.3	.5	1.6	.3	.0	.6	.0	.0	.0
4. Receptor	174.	2.9	.4	.5	.0	.0	.6	.0	.0	.3

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.2	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.8	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0

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

                JOB: Balboa Blvd & Woodley PM 2005
                RUN: Hour 1          (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=   1.0 M/S             Z0= 100. CM            ALT=   396. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M               AMB=   .0 PPM
     SIGTH=    5. DEGREES        TEMP=  4.4 DEGREE (C)


 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*-----------------------------
A. NB External  *    16     0    16   600 *  AG   2291   6.5     .0  18.9
B. NB Approach  *    16   600    16   755 *  AG   1718  11.6     .0  18.9
C. NB Depart    *    16   755    16   910 *  AG   1198  11.6     .0  18.9
D. NB External  *    16   910    16  1510 *  AG   1198   6.5     .0  18.9
E. NB Left   57 *    16   600     8   755 *  AG    573  11.6     .0  18.9
F. SB Left   26 *     0   910     8   755 *  AG    269  11.6     .0  18.9
G. SB External  *     0  1510     0   910 *  AG   1075   6.5     .0  18.9
H. SB Approach  *     0   910     0   755 *  AG    806  11.6     .0  18.9
I. SB Depart    *     0   755     0   600 *  AG    590  11.6     .0  18.9
J. SB External  *     0   600     0     0 *  AG    590   6.5     .0  18.9
K. EB External  *  -750   750  -150   750 *  AG     16   6.5     .0  12.8
L. EB Approach  *  -150   750     8   750 *  AG     12  11.6     .0  12.8
M. EB Depart    *     8   750   166   750 *  AG    849  11.6     .0  12.8
N. EB External  *   166   750   766   750 *  AG    849   6.5     .0  12.8
O. WB External  *   766   760   166   760 *  AG    191   6.5     .0  12.8
P. WB Approach  *   166   760     8   760 *  AG    143  11.6     .0  12.8
Q. WB Depart    *     8   760  -150   760 *  AG    936  11.6     .0  12.8
R. WB External  *  -150   760  -750   760 *  AG    936   6.5     .0  12.8
S. EB Left   4  *  -150   750     8   755 *  AG      4  11.6     .0  12.8
T. WB Left   48 *   166   760     8   755 *  AG     48  11.6     .0  12.8
```



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

                JOB: Balboa Blvd & Woodley PM 2005
                RUN: Hour 1          (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. Receptor *     -3    747   2.0
2. Receptor *     19    747   2.0
3. Receptor *     19    763   2.0
4. Receptor *     -3    763   2.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
------------*-------*-------*-----------------------------------------
1. Receptor *   88. *   2.4 *   .0   .5   .0   .0   .2   .0   .0   .0
2. Receptor *  357. *   2.7 *   .0   .3  1.3   .2   .0   .1   .3   .1
3. Receptor *  182. *   3.6 *   .5  1.9   .2   .0   .5   .0   .0   .0
4. Receptor *  172. *   2.5 *   .2   .7   .0   .0   .6   .0   .0   .1


            *                        CONC/LINK
            *                          (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-----------------------------------------------------------
1. Receptor *   .2   .0   .0   .0  1.1   .2   .0   .0   .0   .0   .0   .0
2. Receptor *   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0
3. Receptor *   .0   .2   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0
4. Receptor *   .6   .0   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0
```

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

                JOB: Hayvenhurst & Index PM 2005
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=   1.0 M/S             Z0= 100. CM            ALT=   396. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M               AMB=   .0 PPM
     SIGTH=    5. DEGREES         TEMP=  4.4 DEGREE (C)


 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
---------------*-------------------------*-----------------------------
A. NB External  *    14     0    14   600 *  AG   1198   6.5     .0  16.7
B. NB Approach  *    14   600    14   755 *  AG    799  11.6     .0  16.7
C. NB Depart    *    14   755    14   910 *  AG    867  11.6     .0  16.7
D. NB External  *    14   910    14  1510 *  AG    867   6.5     .0  16.7
E. NB Left   39 *    14   600     7   755 *  AG    399  11.6     .0  16.7
F. SB Left   0  *     0   910     7   755 *  AG      0  11.6     .0  16.7
G. SB External  *     0  1510     0   910 *  AG    790   6.5     .0  16.7
H. SB Approach  *     0   910     0   755 *  AG    790  11.6     .0  16.7
I. SB Depart    *     0   755     0   600 *  AG    595  11.6     .0  16.7
J. SB External  *     0   600     0     0 *  AG    595   6.5     .0  16.7
K. EB External  *  -750   750  -150   750 *  AG    136   6.5     .0  12.8
L. EB Approach  *  -150   750     7   750 *  AG     68  11.6     .0  12.8
M. EB Depart    *     7   750   164   750 *  AG      0  11.6     .0  12.8
N. EB External  *   164   750   764   750 *  AG      0   6.5     .0  12.8
O. WB External  *   764   760   164   760 *  AG      0   6.5     .0  12.8
P. WB Approach  *   164   760     7   760 *  AG      0  11.6     .0  12.8
Q. WB Depart    *     7   760  -150   760 *  AG    662  11.6     .0  12.8
R. WB External  *  -150   760  -750   760 *  AG    662   6.5     .0  12.8
S. EB Left   68 *  -150   750     7   755 *  AG     68  11.6     .0  12.8
T. WB Left   0  *   164   760     7   755 *  AG      0  11.6     .0  12.8
```



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

                JOB: Hayvenhurst & Index PM 2005
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. Receptor *     -3    747   2.0
2. Receptor *     17    747   2.0
3. Receptor *     17    763   2.0
4. Receptor *     -3    763   2.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
------------*-------*-------*-------------------------------------------
1. Receptor *    3. *   1.9 *   .0   .0   .2   .2   .0   .0   .2  1.0
2. Receptor *  358. *   1.8 *   .0   .1  1.1   .2   .0   .0   .2   .0
3. Receptor *  183. *   2.1 *   .2  1.0   .2   .0   .4   .0   .0   .0
4. Receptor *  175. *   2.0 *   .3   .3   .0   .0   .3   .0   .0   .1


            *                        CONC/LINK
            *                          (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. Receptor *   .1   .0   .0   .0   .0   .0   .0   .0   .2   .0   .0   .0
2. Receptor *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
3. Receptor *   .1   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
4. Receptor *   .7   .0   .0   .0   .0   .0   .0   .0   .2   .0   .0   .0
```

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

                JOB: Hayvenhurst & Lassen PM 2005
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=   1.0 M/S            Z0= 100. CM           ALT=   396. (M)
       BRG= WORST CASE           VD=   .0 CM/S
      CLAS=     7 (G)            VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP=  4.4 DEGREE (C)


 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *             EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*-----------------------------
A. NB External  *    14     0    14   600 *  AG    163   6.5     .0  16.7
B. NB Approach  *    14   600    14   757 *  AG    123  11.6     .0  16.7
C. NB Depart    *    14   757    14   914 *  AG    596  11.6     .0  16.7
D. NB External  *    14   914    14  1514 *  AG    596   6.5     .0  16.7
E. NB Left   40 *    14   600     7   757 *  AG     40  11.6     .0  16.7
F. SB Left   15 *     0   914     7   757 *  AG    150  11.6     .0  16.7
G. SB External  *     0  1514     0   914 *  AG    600   6.5     .0  16.7
H. SB Approach  *     0   914     0   757 *  AG    450  11.6     .0  16.7
I. SB Depart    *     0   757     0   600 *  AG    814  11.6     .0  16.7
J. SB External  *     0   600     0     0 *  AG    814   6.5     .0  16.7
K. EB External  *  -750   750  -150   750 *  AG   1148   6.5     .0  16.7
L. EB Approach  *  -150   750     7   750 *  AG    861  11.6     .0  16.7
M. EB Depart    *     7   750   164   750 *  AG    765  11.6     .0  16.7
N. EB External  *   164   750   764   750 *  AG    765   6.5     .0  16.7
O. WB External  *   764   764   164   764 *  AG    907   6.5     .0  16.7
P. WB Approach  *   164   764     7   764 *  AG    680  11.6     .0  16.7
Q. WB Depart    *     7   764  -150   764 *  AG    643  11.6     .0  16.7
R. WB External  *  -150   764  -750   764 *  AG    643   6.5     .0  16.7
S. EB Left   28 *  -150   750     7   757 *  AG    287  11.6     .0  16.7
T. WB Left   22 *   164   764     7   757 *  AG    227  11.6     .0  16.7
```

□□

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

                JOB: Hayvenhurst & Lassen PM 2005
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. Receptor *     -3    747   2.0
2. Receptor *     17    747   2.0
3. Receptor *     17    767   2.0
4. Receptor *     -3    767   2.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
------------*-------*-------*-----------------------------------------
1. Receptor *   86. *   2.1 *   .0   .0   .0   .0   .0   .0   .0   .0
2. Receptor *  272. *   2.3 *   .0   .0   .0   .0   .0   .0   .0   .0
3. Receptor *  266. *   2.1 *   .0   .0   .2   .0   .0   .0   .0   .1
4. Receptor *   93. *   2.1 *   .0   .0   .2   .0   .0   .0   .0   .1


            *                        CONC/LINK
            *                          (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-----------------------------------------------------------
1. Receptor *   .2   .0   .0   .2   .9   .1   .2   .2   .0   .0   .0   .2
2. Receptor *   .3   .0   .3  1.0   .2   .0   .0   .0   .0   .2   .3   .0
3. Receptor *   .0   .0   .3   .2   .0   .0   .0   .2   .8   .1   .2   .0
4. Receptor *   .0   .0   .0   .0   .1   .2   .2   .8   .2   .0   .0   .2
```

□□

Granada Hills - Knollwood CO 2030 Output

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

JOB: GH Balboa Blvd & Balboa Rd PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S	Z0= 100. CM	ALT= 396. (M)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 4.4 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	3827	1.2	.0	18.9
B. NB Approach	16	600	16	757	AG	2551	1.8	.0	18.9
C. NB Depart	16	757	16	914	AG	2795	1.8	.0	18.9
D. NB External	16	914	16	1514	AG	2795	1.2	.0	18.9
E. NB Left 12	16	600	8	757	AG	1276	1.8	.0	18.9
F. SB Left 0	0	914	8	757	AG	0	1.8	.0	18.9
G. SB External	0	1514	0	914	AG	2196	1.2	.0	18.9
H. SB Approach	0	914	0	757	AG	2196	1.8	.0	18.9
I. SB Depart	0	757	0	600	AG	1707	1.8	.0	18.9
J. SB External	0	600	0	0	AG	1707	1.2	.0	18.9
K. EB External	-750	750	-150	750	AG	487	1.2	.0	16.7
L. EB Approach	-150	750	8	750	AG	243	1.8	.0	16.7
M. EB Depart	8	750	166	750	AG	0	1.8	.0	16.7
N. EB External	166	750	766	750	AG	0	1.2	.0	16.7
O. WB External	766	764	166	764	AG	0	1.2	.0	16.7
P. WB Approach	166	764	8	764	AG	0	1.8	.0	16.7
Q. WB Depart	8	764	-150	764	AG	2008	1.8	.0	16.7
R. WB External	-150	764	-750	764	AG	2008	1.2	.0	16.7
S. EB Left 24	-150	750	8	757	AG	244	1.8	.0	16.7
T. WB Left 0	166	764	8	757	AG	0	1.8	.0	16.7

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

JOB: GH Balboa Blvd & Balboa Rd PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	767	2.0
4. Receptor	-3	767	2.0

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. Receptor	3.	.7	.0	.0	.0	.1	.0	.0	.0	.3
2. Receptor	358.	.7	.0	.0	.4	.0	.0	.0	.0	.0
3. Receptor	183.	.8	.0	.4	.0	.0	.2	.0	.0	.0
4. Receptor	174.	.8	.0	.1	.0	.0	.1	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	1967	1.2	.0	18.9
B. NB Approach	*	16	600	16	757	* AG	1475	1.8	.0	18.9
C. NB Depart	*	16	757	16	914	* AG	1451	1.8	.0	18.9
D. NB External	*	16	914	16	1514	* AG	1451	1.2	.0	18.9
E. NB Left 49	*	16	600	8	757	* AG	492	1.8	.0	18.9
F. SB Left 32	*	0	914	8	757	* AG	321	1.8	.0	18.9
G. SB External	*	0	1514	0	914	* AG	1284	1.2	.0	18.9
H. SB Approach	*	0	914	0	757	* AG	963	1.8	.0	18.9
I. SB Depart	*	0	757	0	600	* AG	1110	1.8	.0	18.9
J. SB External	*	0	600	0	0	* AG	1110	1.2	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	1091	1.2	.0	16.7
L. EB Approach	*	-150	750	8	750	* AG	818	1.8	.0	16.7
M. EB Depart	*	8	750	166	750	* AG	1358	1.8	.0	16.7
N. EB External	*	166	750	766	750	* AG	1358	1.2	.0	16.7
O. WB External	*	766	764	166	764	* AG	780	1.2	.0	16.7
P. WB Approach	*	166	764	8	764	* AG	585	1.8	.0	16.7
Q. WB Depart	*	8	764	-150	764	* AG	1203	1.8	.0	16.7
R. WB External	*	-150	764	-750	764	* AG	1203	1.2	.0	16.7
S. EB Left 27	*	-150	750	8	757	* AG	273	1.8	.0	16.7
T. WB Left 19	*	166	764	8	757	* AG	195	1.8	.0	16.7

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

JOB: GH Balboa Blvd & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	767	2.0
4. Receptor	*	-3	767	2.0

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. Receptor	*	88.	*	.5	*	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	357.	*	.5	*	.0	.0	.2	.0	.0	.0	.0	.0
3. Receptor	*	182.	*	.6	*	.0	.2	.0	.0	.0	.0	.0	.0
4. Receptor	*	176.	*	.5	*	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & Devonshire PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	1997	1.2	.0	18.9
B. NB Approach	*	16	600	16	758	* AG	1498	1.8	.0	18.9
C. NB Depart	*	16	758	16	916	* AG	1480	1.8	.0	18.9
D. NB External	*	16	916	16	1516	* AG	1480	1.2	.0	18.9
E. NB Left 49	*	16	600	8	758	* AG	499	1.8	.0	18.9
F. SB Left 25	*	0	916	8	758	* AG	259	1.8	.0	18.9
G. SB External	*	0	1516	0	916	* AG	1036	1.2	.0	18.9
H. SB Approach	*	0	916	0	758	* AG	777	1.8	.0	18.9
I. SB Depart	*	0	758	0	600	* AG	999	1.8	.0	18.9
J. SB External	*	0	600	0	0	* AG	999	1.2	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	1386	1.2	.0	18.9
L. EB Approach	*	-150	750	8	750	* AG	1039	1.8	.0	18.9
M. EB Depart	*	8	750	166	750	* AG	1450	1.8	.0	18.9
N. EB External	*	166	750	766	750	* AG	1450	1.2	.0	18.9
O. WB External	*	766	766	166	766	* AG	537	1.2	.0	18.9
P. WB Approach	*	166	766	8	766	* AG	403	1.8	.0	18.9
Q. WB Depart	*	8	766	-150	766	* AG	1027	1.8	.0	18.9
R. WB External	*	-150	766	-750	766	* AG	1027	1.2	.0	18.9
S. EB Left 34	*	-150	750	8	758	* AG	347	1.8	.0	18.9
T. WB Left 13	*	166	766	8	758	* AG	134	1.8	.0	18.9

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

JOB: GH Balboa Blvd & Devonshire PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	769	2.0
4. Receptor	*	-3	769	2.0

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. Receptor	* 88.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	* 273.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	* 182.	* .6	*	.0	.2	.0	.0	.0	.0	.0	.0
4. Receptor	* 176.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & Index PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	1973	1.2	.0	18.9
B. NB Approach	16	600	16	755	AG	1480	1.8	.0	18.9
C. NB Depart	16	755	16	910	AG	1179	1.8	.0	18.9
D. NB External	16	910	16	1510	AG	1179	1.2	.0	18.9
E. NB Left 49	16	600	8	755	AG	493	1.8	.0	18.9
F. SB Left 39	0	910	8	755	AG	390	1.8	.0	18.9
G. SB External	0	1510	0	910	AG	1559	1.2	.0	18.9
H. SB Approach	0	910	0	755	AG	1169	1.8	.0	18.9
I. SB Depart	0	755	0	600	AG	971	1.8	.0	18.9
J. SB External	0	600	0	0	AG	971	1.2	.0	18.9
K. EB External	-750	750	-150	750	AG	626	1.2	.0	12.8
L. EB Approach	-150	750	8	750	AG	469	1.8	.0	12.8
M. EB Depart	8	750	166	750	AG	1195	1.8	.0	12.8
N. EB External	166	750	766	750	AG	1195	1.2	.0	12.8
O. WB External	766	760	166	760	AG	138	1.2	.0	12.8
P. WB Approach	166	760	8	760	AG	103	1.8	.0	12.8
Q. WB Depart	8	760	-150	760	AG	951	1.8	.0	12.8
R. WB External	-150	760	-750	760	AG	951	1.2	.0	12.8
S. EB Left 15	-150	750	8	755	AG	157	1.8	.0	12.8
T. WB Left 35	166	760	8	755	AG	35	1.8	.0	12.8

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

JOB: GH Balboa Blvd & Index PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	763	2.0
4. Receptor	-3	763	2.0

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. Receptor	3.	.5	.0	.0	.0	.0	.0	.0	.0	.2
2. Receptor	356.	.5	.0	.0	.2	.0	.0	.0	.0	.0
3. Receptor	182.	.6	.0	.3	.0	.0	.0	.0	.0	.0
4. Receptor	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & Rinaldi PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	3394	1.2	.0	18.9
B. NB Approach	*	16	600	16	755	* AG	2545	1.8	.0	18.9
C. NB Depart	*	16	755	16	910	* AG	2215	1.8	.0	18.9
D. NB External	*	16	910	16	1510	* AG	2215	1.2	.0	18.9
E. NB Left 84	*	16	600	8	755	* AG	849	1.8	.0	18.9
F. SB Left 62	*	0	910	8	755	* AG	620	1.8	.0	18.9
G. SB External	*	0	1510	0	910	* AG	2480	1.2	.0	18.9
H. SB Approach	*	0	910	0	755	* AG	1860	1.8	.0	18.9
I. SB Depart	*	0	755	0	600	* AG	1759	1.8	.0	18.9
J. SB External	*	0	600	0	0	* AG	1759	1.2	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	841	1.2	.0	12.8
L. EB Approach	*	-150	750	8	750	* AG	631	1.8	.0	12.8
M. EB Depart	*	8	750	166	750	* AG	1890	1.8	.0	12.8
N. EB External	*	166	750	766	750	* AG	1890	1.2	.0	12.8
O. WB External	*	766	760	166	760	* AG	1234	1.2	.0	12.8
P. WB Approach	*	166	760	8	760	* AG	925	1.8	.0	12.8
Q. WB Depart	*	8	760	-150	760	* AG	2085	1.8	.0	12.8
R. WB External	*	-150	760	-750	760	* AG	2085	1.2	.0	12.8
S. EB Left 21	*	-150	750	8	755	* AG	210	1.8	.0	12.8
T. WB Left 30	*	166	760	8	755	* AG	309	1.8	.0	12.8

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

JOB: GH Balboa Blvd & Rinaldi PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	763	2.0
4. Receptor	*	-3	763	2.0

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. Receptor	* 87.	* .8	*	.0	.1	.0	.0	.0	.0	.0	.0
2. Receptor	* 356.	* .8	*	.0	.0	.4	.0	.0	.0	.0	.0
3. Receptor	* 182.	* .9	*	.1	.4	.0	.0	.1	.0	.0	.0
4. Receptor	* 175.	* .8	*	.1	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & San Fern. Mission PM 20
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S	Z0= 100. CM	ALT= 396. (M)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 4.4 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	2088	1.2	.0	18.9
B. NB Approach	16	600	16	757	AG	1566	1.8	.0	18.9
C. NB Depart	16	757	16	914	AG	1526	1.8	.0	18.9
D. NB External	16	914	16	1514	AG	1526	1.2	.0	18.9
E. NB Left 52	16	600	8	757	AG	522	1.8	.0	18.9
F. SB Left 39	0	914	8	757	AG	390	1.8	.0	18.9
G. SB External	0	1514	0	914	AG	1559	1.2	.0	18.9
H. SB Approach	0	914	0	757	AG	1169	1.8	.0	18.9
I. SB Depart	0	757	0	600	AG	1261	1.8	.0	18.9
J. SB External	0	600	0	0	AG	1261	1.2	.0	18.9
K. EB External	-750	750	-150	750	AG	1239	1.2	.0	16.7
L. EB Approach	-150	750	8	750	AG	929	1.8	.0	16.7
M. EB Depart	8	750	166	750	AG	1531	1.8	.0	16.7
N. EB External	166	750	766	750	AG	1531	1.2	.0	16.7
O. WB External	766	764	166	764	AG	687	1.2	.0	16.7
P. WB Approach	166	764	8	764	AG	515	1.8	.0	16.7
Q. WB Depart	8	764	-150	764	AG	1255	1.8	.0	16.7
R. WB External	-150	764	-750	764	AG	1255	1.2	.0	16.7
S. EB Left 31	-150	750	8	757	AG	310	1.8	.0	16.7
T. WB Left 17	166	764	8	757	AG	172	1.8	.0	16.7

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

JOB: GH Balboa Blvd & San Fern. Mission PM 20
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	767	2.0
4. Receptor	-3	767	2.0

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. Receptor	88.	.6	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	357.	.6	.0	.0	.2	.0	.0	.0	.0	.0
3. Receptor	182.	.6	.0	.3	.0	.0	.0	.0	.0	.0
4. Receptor	176.	.6	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Balboa Blvd & Sesson Rd PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	3355	1.2	.0	18.9
B. NB Approach	*	16	600	16	758	* AG	2237	1.8	.0	18.9
C. NB Depart	*	16	758	16	916	* AG	2473	1.8	.0	18.9
D. NB External	*	16	916	16	1516	* AG	2473	1.2	.0	18.9
E. NB Left 11	*	16	600	8	758	* AG	1118	1.8	.0	18.9
F. SB Left 0	*	0	916	8	758	* AG	0	1.8	.0	18.9
G. SB External	*	0	1516	0	916	* AG	2291	1.2	.0	18.9
H. SB Approach	*	0	916	0	758	* AG	2291	1.8	.0	18.9
I. SB Depart	*	0	758	0	600	* AG	1762	1.8	.0	18.9
J. SB External	*	0	600	0	0	* AG	1762	1.2	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	471	1.2	.0	18.9
L. EB Approach	*	-150	750	8	750	* AG	235	1.8	.0	18.9
M. EB Depart	*	8	750	166	750	* AG	0	1.8	.0	18.9
N. EB External	*	166	750	766	750	* AG	0	1.2	.0	18.9
O. WB External	*	766	766	166	766	* AG	0	1.2	.0	18.9
P. WB Approach	*	166	766	8	766	* AG	0	1.8	.0	18.9
Q. WB Depart	*	8	766	-150	766	* AG	1882	1.8	.0	18.9
R. WB External	*	-150	766	-750	766	* AG	1882	1.2	.0	18.9
S. EB Left 23	*	-150	750	8	758	* AG	236	1.8	.0	18.9
T. WB Left 0	*	166	766	8	758	* AG	0	1.8	.0	18.9

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

JOB: GH Balboa Blvd & Sesson Rd PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	769	2.0
4. Receptor	*	-3	769	2.0

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. Receptor	* 3.	* .7	*	.0	.0	.0	.0	.0	.0	.0	.4
2. Receptor	* 357.	* .7	*	.0	.0	.4	.0	.0	.0	.0	.0
3. Receptor	* 183.	* .8	*	.0	.3	.0	.0	.1	.0	.0	.0
4. Receptor	* 175.	* .8	*	.1	.0	.0	.0	.1	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

                JOB: GH Balboa Blvd & Woodley PM 2030
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
        U=   1.0 M/S            Z0= 100. CM           ALT=   396. (M)
      BRG= WORST CASE           VD=   .0 CM/S
     CLAS=     7 (G)            VS=   .0 CM/S
     MIXH= 1000. M              AMB=   .0 PPM
    SIGTH=    5. DEGREES       TEMP=  4.4 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	16	0	16	600	AG	3305	1.2	.0	18.9
B. NB Approach	16	600	16	755	AG	2479	1.8	.0	18.9
C. NB Depart	16	755	16	910	AG	1822	1.8	.0	18.9
D. NB External	16	910	16	1510	AG	1822	1.2	.0	18.9
E. NB Left 82	16	600	8	755	AG	826	1.8	.0	18.9
F. SB Left 51	0	910	8	755	AG	517	1.8	.0	18.9
G. SB External	0	1510	0	910	AG	2069	1.2	.0	18.9
H. SB Approach	0	910	0	755	AG	1552	1.8	.0	18.9
I. SB Depart	0	755	0	600	AG	1204	1.8	.0	18.9
J. SB External	0	600	0	0	AG	1204	1.2	.0	18.9
K. EB External	-750	750	-150	750	AG	284	1.2	.0	12.8
L. EB Approach	-150	750	8	750	AG	213	1.8	.0	12.8
M. EB Depart	8	750	166	750	AG	1485	1.8	.0	12.8
N. EB External	166	750	766	750	AG	1485	1.2	.0	12.8
O. WB External	766	760	166	760	AG	392	1.2	.0	12.8
P. WB Approach	166	760	8	760	AG	294	1.8	.0	12.8
Q. WB Depart	8	760	-150	760	AG	1539	1.8	.0	12.8
R. WB External	-150	760	-750	760	AG	1539	1.2	.0	12.8
S. EB Left 71	-150	750	8	755	AG	71	1.8	.0	12.8
T. WB Left 98	166	760	8	755	AG	98	1.8	.0	12.8

□□

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

                JOB: GH Balboa Blvd & Woodley PM 2030
                RUN: Hour 1           (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide
```

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Receptor	-3	747	2.0
2. Receptor	19	747	2.0
3. Receptor	19	763	2.0
4. Receptor	-3	763	2.0

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. Receptor	3.	.6	.0	.0	.0	.0	.0	.0	.0	.3
2. Receptor	356.	.7	.0	.0	.3	.0	.0	.0	.0	.0
3. Receptor	182.	.8	.1	.4	.0	.0	.1	.0	.0	.0
4. Receptor	174.	.6	.0	.1	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

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

JOB: GH Woodley Ave & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	16	0	16	600	* AG	1963	1.2	.0	18.9
B. NB Approach	*	16	600	16	757	* AG	1472	1.8	.0	18.9
C. NB Depart	*	16	757	16	914	* AG	1444	1.8	.0	18.9
D. NB External	*	16	914	16	1514	* AG	1444	1.2	.0	18.9
E. NB Left 49	*	16	600	8	757	* AG	491	1.8	.0	18.9
F. SB Left 13	*	0	914	8	757	* AG	130	1.8	.0	18.9
G. SB External	*	0	1514	0	914	* AG	518	1.2	.0	18.9
H. SB Approach	*	0	914	0	757	* AG	388	1.8	.0	18.9
I. SB Depart	*	0	757	0	600	* AG	721	1.8	.0	18.9
J. SB External	*	0	600	0	0	* AG	721	1.2	.0	18.9
K. EB External	*	-750	750	-150	750	* AG	1077	1.2	.0	16.7
L. EB Approach	*	-150	750	8	750	* AG	808	1.8	.0	16.7
M. EB Depart	*	8	750	166	750	* AG	1160	1.8	.0	16.7
N. EB External	*	166	750	766	750	* AG	1160	1.2	.0	16.7
O. WB External	*	766	764	166	764	* AG	774	1.2	.0	16.7
P. WB Approach	*	166	764	8	764	* AG	580	1.8	.0	16.7
Q. WB Depart	*	8	764	-150	764	* AG	1007	1.8	.0	16.7
R. WB External	*	-150	764	-750	764	* AG	1007	1.2	.0	16.7
S. EB Left 26	*	-150	750	8	757	* AG	269	1.8	.0	16.7
T. WB Left 19	*	166	764	8	757	* AG	194	1.8	.0	16.7

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

JOB: GH Woodley Ave & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	19	747	2.0
3. Receptor	*	19	767	2.0
4. Receptor	*	-3	767	2.0

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. Receptor	* 88.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	* 358.	* .5	*	.0	.0	.2	.0	.0	.0	.0	.0
3. Receptor	* 182.	* .6	*	.0	.2	.0	.0	.0	.0	.0	.0
4. Receptor	* 175.	* .4	*	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

JOB: GH Zelzah & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 100. CM ALT= 396. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 4.4 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NB External	*	10	0	10	600	* AG	971	1.2	.0	12.8
B. NB Approach	*	10	600	10	757	* AG	728	1.8	.0	12.8
C. NB Depart	*	10	757	10	914	* AG	1117	1.8	.0	12.8
D. NB External	*	10	914	10	1514	* AG	1117	1.2	.0	12.8
E. NB Left 24	*	10	600	5	757	* AG	243	1.8	.0	12.8
F. SB Left 17	*	0	914	5	757	* AG	178	1.8	.0	12.8
G. SB External	*	0	1514	0	914	* AG	712	1.2	.0	12.8
H. SB Approach	*	0	914	0	757	* AG	534	1.8	.0	12.8
I. SB Depart	*	0	757	0	600	* AG	988	1.8	.0	12.8
J. SB External	*	0	600	0	0	* AG	988	1.2	.0	12.8
K. EB External	*	-750	750	-150	750	* AG	1688	1.2	.0	16.7
L. EB Approach	*	-150	750	5	750	* AG	1266	1.8	.0	16.7
M. EB Depart	*	5	750	160	750	* AG	1265	1.8	.0	16.7
N. EB External	*	160	750	760	750	* AG	1265	1.2	.0	16.7
O. WB External	*	760	764	160	764	* AG	839	1.2	.0	16.7
P. WB Approach	*	160	764	5	764	* AG	629	1.8	.0	16.7
Q. WB Depart	*	5	764	-150	764	* AG	840	1.8	.0	16.7
R. WB External	*	-150	764	-750	764	* AG	840	1.2	.0	16.7
S. EB Left 42	*	-150	750	5	757	* AG	422	1.8	.0	16.7
T. WB Left 21	*	160	764	5	757	* AG	210	1.8	.0	16.7

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

JOB: GH Zelzah & Chatsworth PM 2030
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Receptor	*	-3	747	2.0
2. Receptor	*	13	747	2.0
3. Receptor	*	13	767	2.0
4. Receptor	*	-3	767	2.0

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. Receptor	* 88.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0
2. Receptor	* 272.	* .6	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	* 183.	* .5	*	.0	.2	.0	.0	.0	.0	.0	.0
4. Receptor	* 177.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Receptor	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
2. Receptor	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Receptor	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Receptor	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Granada Hills - Knollwood CalEEMod 2005 Output

Granada Hills Existing Condition

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	2883.46	1000sqft
Manufacturing	28.18	1000sqft
Apartments Low Rise	3226	Dwelling Unit
Single Family Housing	15987	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Los Angeles Department of Water & Power
Climate Zone	11	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics - Existing Year is 2005. Historic data used.

Land Use - Acerage, Population, and Unit Amounts from Project Description

Construction Phase - No Construction, already built

Off-road Equipment - No Construction

Vehicle Trips - Based on LA GPF

Energy Use - This is the existing year of 2005, historic data is appropriate

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Energy	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Mobile	2,437.71	5,346.03	23,017.90	35.51	1,837.29	159.93	1,997.22	63.27	159.93	223.20		1,793,579.76		176.72		1,797,290.80
Total	**5,448.18**	**5,673.90**	**31,332.55**	**52.29**	**1,837.29**	**159.93**	**3,037.86**	**63.27**	**159.93**	**1,263.61**	**135,580.99**	**2,408,131.21**		**723.14**	**13.17**	**2,562,981.38**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Energy	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Mobile	2,437.71	5,346.03	23,017.90	35.51	1,837.29	159.93	1,997.22	63.27	159.93	223.20		1,793,579.76		176.72		1,797,290.80
Total	**5,448.18**	**5,673.90**	**31,332.55**	**52.29**	**1,837.29**	**159.93**	**3,037.86**	**63.27**	**159.93**	**1,263.61**	**135,580.99**	**2,408,131.21**		**723.14**	**13.17**	**2,562,981.38**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,437.71	5,346.03	23,017.90	35.51	1,837.29	159.93	1,997.22	63.27	159.93	223.20		1,793,579.76		176.72		1,797,290.80
Unmitigated	2,437.71	5,346.03	23,017.90	35.51	1,837.29	159.93	1,997.22	63.27	159.93	223.20		1,793,579.76		176.72		1,797,290.80
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	21,259.34	23,098.16	19581.82	56,441,737	56,441,737
General Office Building	31,746.89	6,833.80	2825.79	50,144,048	50,144,048
Manufacturing	107.65	41.99	17.47	202,970	202,970
Single Family Housing	152,995.59	161,148.96	140205.99	403,993,975	403,993,975
Total	206,109.47	191,122.91	162,631.07	510,782,729	510,782,729

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.00	7.00	7.00	40.20	19.20	40.60
General Office Building	7.00	7.00	7.00	33.00	48.00	19.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Manufacturing	7.00	7.00	7.00	59.00	28.00	13.00
Single Family Housing	10.00	7.00	7.00	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
NaturalGas Unmitigated	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	194156	2.09	17.89	7.61	0.11		0.00	1.45		0.00	1.45		22,841.85		0.44	0.42	22,980.86
General Office Building	98274.6	1.06	9.63	8.09	0.06		0.00	0.73		0.00	0.73		11,561.72		0.22	0.21	11,632.08
Manufacturing	1528.67	0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01		179.84		0.00	0.00	180.94
Single Family Housing	1.96558e+006	21.20	181.14	77.08	1.16		0.00	14.65		0.00	14.65		231,245.19		4.43	4.24	232,652.51
Total		**24.37**	**208.81**	**92.91**	**1.33**		**0.00**	**16.84**		**0.00**	**16.84**		**265,828.60**		**5.09**	**4.87**	**267,446.39**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	194.156	2.09	17.89	7.61	0.11		0.00	1.45		0.00	1.45		22,841.85		0.44	0.42	22,980.86
General Office Building	98.2746	1.06	9.63	8.09	0.06		0.00	0.73		0.00	0.73		11,561.72		0.22	0.21	11,632.08
Manufacturing	1.52867	0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01		179.84		0.00	0.00	180.94
Single Family Housing	1965.58	21.20	181.14	77.08	1.16		0.00	14.65		0.00	14.65		231,245.19		4.43	4.24	232,652.51
Total		**24.37**	**208.81**	**92.91**	**1.33**		**0.00**	**16.84**		**0.00**	**16.84**		**265,828.60**		**5.09**	**4.87**	**267,446.39**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Unmitigated	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	169.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	691.30					0.00	0.00		0.00	0.00						0.00
Hearth	2,045.00	93.79	6,359.67	15.36		0.00	1,015.96		0.00	1,015.73	135,580.99	345,834.00		536.70	8.30	495,258.11
Landscaping	80.59	25.26	1,862.07	0.08		0.00	7.84		0.00	7.84		2,888.85		4.63		2,986.08
Total	**2,986.10**	**119.05**	**8,221.74**	**15.44**		**0.00**	**1,023.80**		**0.00**	**1,023.57**	**135,580.99**	**348,722.85**		**541.33**	**8.30**	**498,244.19**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	169.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	691.30					0.00	0.00		0.00	0.00						0.00
Hearth	2,045.00	93.79	6,359.67	15.36		0.00	1,015.96		0.00	1,015.73	135,580.99	345,834.00		536.70	8.30	495,258.11
Landscaping	80.59	25.26	1,862.07	0.08		0.00	7.84		0.00	7.84		2,888.85		4.63		2,986.08
Total	**2,986.10**	**119.05**	**8,221.74**	**15.44**		**0.00**	**1,023.80**		**0.00**	**1,023.57**	**135,580.99**	**348,722.85**		**541.33**	**8.30**	**498,244.19**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Granada Hills Existing Condition

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	2883.46	1000sqft
Manufacturing	28.18	1000sqft
Apartments Low Rise	3226	Dwelling Unit
Single Family Housing	15987	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Los Angeles Department of Water & Power
Climate Zone	11	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics - Existing Year is 2005. Historic data used.

Land Use - Acerage, Population, and Unit Amounts from Project Description

Construction Phase - No Construction, already built

Off-road Equipment - No Construction

Vehicle Trips - Based on LA GPF

Energy Use - This is the existing year of 2005, historic data is appropriate

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Energy	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Mobile	2,298.71	4,839.24	22,968.58	36.67	1,837.29	158.10	1,995.39	63.27	158.10	221.37		1,906,948.68		179.79		1,910,724.18
Total	**5,309.18**	**5,167.11**	**31,283.23**	**53.45**	**1,837.29**	**158.10**	**3,036.03**	**63.27**	**158.10**	**1,261.78**	**135,580.99**	**2,521,500.13**		**726.21**	**13.17**	**2,676,414.76**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Energy	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Mobile	2,298.71	4,839.24	22,968.58	36.67	1,837.29	158.10	1,995.39	63.27	158.10	221.37		1,906,948.68		179.79		1,910,724.18
Total	**5,309.18**	**5,167.11**	**31,283.23**	**53.45**	**1,837.29**	**158.10**	**3,036.03**	**63.27**	**158.10**	**1,261.78**	**135,580.99**	**2,521,500.13**		**726.21**	**13.17**	**2,676,414.76**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,298.71	4,839.24	22,968.58	36.67	1,837.29	158.10	1,995.39	63.27	158.10	221.37		1,906,948.68		179.79		1,910,724.18
Unmitigated	2,298.71	4,839.24	22,968.58	36.67	1,837.29	158.10	1,995.39	63.27	158.10	221.37		1,906,948.68		179.79		1,910,724.18
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	21,259.34	23,098.16	19581.82	56,441,737	56,441,737
General Office Building	31,746.89	6,833.80	2825.79	50,144,048	50,144,048
Manufacturing	107.65	41.99	17.47	202,970	202,970
Single Family Housing	152,995.59	161,148.96	140205.99	403,993,975	403,993,975
Total	206,109.47	191,122.91	162,631.07	510,782,729	510,782,729

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.00	7.00	7.00	40.20	19.20	40.60
General Office Building	7.00	7.00	7.00	33.00	48.00	19.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Manufacturing	7.00	7.00	7.00	59.00	28.00	13.00
Single Family Housing	10.00	7.00	7.00	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
NaturalGas Unmitigated	24.37	208.82	92.91	1.33		0.00	16.84		0.00	16.84		265,828.60		5.10	4.87	267,446.39
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	194156	2.09	17.89	7.61	0.11		0.00	1.45		0.00	1.45		22,841.85		0.44	0.42	22,980.86
General Office Building	98274.6	1.06	9.63	8.09	0.06		0.00	0.73		0.00	0.73		11,561.72		0.22	0.21	11,632.08
Manufacturing	1528.67	0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01		179.84		0.00	0.00	180.94
Single Family Housing	1.96558e+006	21.20	181.14	77.08	1.16		0.00	14.65		0.00	14.65		231,245.19		4.43	4.24	232,652.51
Total		**24.37**	**208.81**	**92.91**	**1.33**		**0.00**	**16.84**		**0.00**	**16.84**		**265,828.60**		**5.09**	**4.87**	**267,446.39**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	194.156	2.09	17.89	7.61	0.11		0.00	1.45		0.00	1.45		22,841.85		0.44	0.42	22,980.86
General Office Building	98.2746	1.06	9.63	8.09	0.06		0.00	0.73		0.00	0.73		11,561.72		0.22	0.21	11,632.08
Manufacturing	1.52867	0.02	0.15	0.13	0.00		0.00	0.01		0.00	0.01		179.84		0.00	0.00	180.94
Single Family Housing	1965.58	21.20	181.14	77.08	1.16		0.00	14.65		0.00	14.65		231,245.19		4.43	4.24	232,652.51
Total		**24.37**	**208.81**	**92.91**	**1.33**		**0.00**	**16.84**		**0.00**	**16.84**		**265,828.60**		**5.09**	**4.87**	**267,446.39**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Unmitigated	2,986.10	119.05	8,221.74	15.45		0.00	1,023.80		0.00	1,023.57	135,580.99	348,722.85		541.32	8.30	498,244.19
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	169.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	691.30					0.00	0.00		0.00	0.00						0.00
Hearth	2,045.00	93.79	6,359.67	15.36		0.00	1,015.96		0.00	1,015.73	135,580.99	345,834.00		536.70	8.30	495,258.11
Landscaping	80.59	25.26	1,862.07	0.08		0.00	7.84		0.00	7.84		2,888.85		4.63		2,986.08
Total	**2,986.10**	**119.05**	**8,221.74**	**15.44**		**0.00**	**1,023.80**		**0.00**	**1,023.57**	**135,580.99**	**348,722.85**		**541.33**	**8.30**	**498,244.19**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	169.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	691.30					0.00	0.00		0.00	0.00						0.00
Hearth	2,045.00	93.79	6,359.67	15.36		0.00	1,015.96		0.00	1,015.73	135,580.99	345,834.00		536.70	8.30	495,258.11
Landscaping	80.59	25.26	1,862.07	0.08		0.00	7.84		0.00	7.84		2,888.85		4.63		2,986.08
Total	**2,986.10**	**119.05**	**8,221.74**	**15.44**		**0.00**	**1,023.80**		**0.00**	**1,023.57**	**135,580.99**	**348,722.85**		**541.33**	**8.30**	**498,244.19**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Granada Hills - Knollwood CalEEMod 2030 Output

Granada Hills - Proposed Plan

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	19089	Dwelling Unit
Apartments Low Rise	3794	Dwelling Unit
General Office Building	7399	1000sqft
Industrial Park	57.38	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Los Angeles Department of Water & Power
Climate Zone	11	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics - Based on LADWP 2011 Power Integration Resource Plan dated December 22, 2011

Land Use - Unit amount, acerage, and population based on Project data.

Construction Phase - No construction schedule available.

Off-road Equipment - No Construction

Vehicle Trips - Based on LA GPF

Woodstoves -

Energy Use - Defaults used

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Energy	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Mobile	786.28	1,817.55	6,027.25	22.31	2,493.39	108.76	2,602.15	35.47	106.09	141.56		1,790,542.15		51.27		1,791,618.90
Total	**4,338.74**	**2,190.31**	**15,617.34**	**42.23**	**2,493.39**	**108.76**	**3,841.95**	**35.47**	**106.09**	**1,381.09**	**161,479.19**	**2,509,522.92**		**699.58**	**15.45**	**2,690,482.93**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Energy	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Mobile	786.28	1,817.55	6,027.25	22.31	2,493.39	108.76	2,602.15	35.47	106.09	141.56		1,790,542.15		51.27		1,791,618.90
Total	**4,338.74**	**2,190.31**	**15,617.34**	**42.23**	**2,493.39**	**108.76**	**3,841.95**	**35.47**	**106.09**	**1,381.09**	**161,479.19**	**2,509,522.92**		**699.58**	**15.45**	**2,690,482.93**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	786.28	1,817.55	6,027.25	22.31	2,493.39	108.76	2,602.15	35.47	106.09	141.56		1,790,542.15		51.27		1,791,618.90
Unmitigated	786.28	1,817.55	6,027.25	22.31	2,493.39	108.76	2,602.15	35.47	106.09	141.56		1,790,542.15		51.27		1,791,618.90
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	25,002.46	27,165.04	23029.58	66,379,402	66,379,402
General Office Building	81,462.99	17,535.63	7251.02	128,670,350	128,670,350
Industrial Park	399.36	142.88	41.89	665,284	665,284
Single Family Housing	182,681.73	192,417.12	167410.53	482,381,997	482,381,997
Total	289,546.54	237,260.67	197,733.02	678,097,033	678,097,033

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.00	7.00	7.00	40.20	19.20	40.60
General Office Building	7.00	7.00	7.00	33.00	48.00	19.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Industrial Park	7.00	7.00	7.00	59.00	28.00	13.00
Single Family Housing	10.00	7.00	7.00	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
NaturalGas Unmitigated	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	214367	2.31	19.76	8.41	0.13		0.00	1.60		0.00	1.60		25,219.63		0.48	0.46	25,373.11
General Office Building	221565	2.39	21.72	18.25	0.13		0.00	1.65		0.00	1.65		26,066.42		0.50	0.48	26,225.06
Industrial Park	1718.26	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01		202.15		0.00	0.00	203.38
Single Family Housing	2.14334e+006	23.11	197.52	84.05	1.26		0.00	15.97		0.00	15.97		252,157.91		4.83	4.62	253,692.50
Total		**27.83**	**239.17**	**110.85**	**1.52**		**0.00**	**19.23**		**0.00**	**19.23**		**303,646.11**		**5.81**	**5.56**	**305,494.05**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	214.367	2.31	19.76	8.41	0.13		0.00	1.60		0.00	1.60		25,219.63		0.48	0.46	25,373.11
General Office Building	221.565	2.39	21.72	18.25	0.13		0.00	1.65		0.00	1.65		26,066.42		0.50	0.48	26,225.06
Industrial Park	1.71826	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01		202.15		0.00	0.00	203.38
Single Family Housing	2143.34	23.11	197.52	84.05	1.26		0.00	15.97		0.00	15.97		252,157.91		4.83	4.62	253,692.50
Total		**27.83**	**239.17**	**110.85**	**1.52**		**0.00**	**19.23**		**0.00**	**19.23**		**303,646.11**		**5.81**	**5.56**	**305,494.05**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Unmitigated	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	128.99					0.00	0.00		0.00	0.00						0.00
Consumer Products	903.09					0.00	0.00		0.00	0.00						0.00
Hearth	2,435.62	111.71	7,574.47	18.30		0.00	1,210.02		0.00	1,209.75	161,479.19	411,894.00		639.21	9.88	589,860.59
Landscaping	56.93	21.88	1,904.77	0.10		0.00	10.55		0.00	10.55		3,440.67		3.27		3,509.40
Total	**3,524.63**	**133.59**	**9,479.24**	**18.40**		**0.00**	**1,220.57**		**0.00**	**1,220.30**	**161,479.19**	**415,334.67**		**642.48**	**9.88**	**593,369.99**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	128.99					0.00	0.00		0.00	0.00						0.00
Consumer Products	903.09					0.00	0.00		0.00	0.00						0.00
Hearth	2,435.62	111.71	7,574.47	18.30		0.00	1,210.02		0.00	1,209.75	161,479.19	411,894.00		639.21	9.88	589,860.59
Landscaping	56.93	21.88	1,904.77	0.10		0.00	10.55		0.00	10.55		3,440.67		3.27		3,509.40
Total	**3,524.63**	**133.59**	**9,479.24**	**18.40**		**0.00**	**1,220.57**		**0.00**	**1,220.30**	**161,479.19**	**415,334.67**		**642.48**	**9.88**	**593,369.99**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Granada Hills - Proposed Plan

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	19089	Dwelling Unit
Apartments Low Rise	3794	Dwelling Unit
General Office Building	7399	1000sqft
Industrial Park	57.38	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Los Angeles Department of Water & Power
Climate Zone	11	**Precipitation Freq (Days)**	33		

1.3 User Entered Comments

Project Characteristics - Based on LADWP 2011 Power Integration Resource Plan dated December 22, 2011

Land Use - Unit amount, acerage, and population based on Project data.

Construction Phase - No construction schedule available.

Off-road Equipment - No Construction

Vehicle Trips - Based on LA GPF

Woodstoves -

Energy Use - Defaults used

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Energy	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Mobile	737.34	1,785.83	6,040.82	24.01	2,493.39	108.36	2,601.75	35.47	105.69	141.16		1,900,129.66		56.46		1,901,315.31
Total	**4,289.80**	**2,158.59**	**15,630.91**	**43.93**	**2,493.39**	**108.36**	**3,841.55**	**35.47**	**105.69**	**1,380.69**	**161,479.19**	**2,619,110.43**		**704.77**	**15.45**	**2,800,179.34**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Energy	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Mobile	737.34	1,785.83	6,040.82	24.01	2,493.39	108.36	2,601.75	35.47	105.69	141.16		1,900,129.66		56.46		1,901,315.31
Total	**4,289.80**	**2,158.59**	**15,630.91**	**43.93**	**2,493.39**	**108.36**	**3,841.55**	**35.47**	**105.69**	**1,380.69**	**161,479.19**	**2,619,110.43**		**704.77**	**15.45**	**2,800,179.34**

3.0 Construction Detail

3.1 Mitigation Measures Construction

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	737.34	1,785.83	6,040.82	24.01	2,493.39	108.36	2,601.75	35.47	105.69	141.16		1,900,129.66		56.46		1,901,315.31
Unmitigated	737.34	1,785.83	6,040.82	24.01	2,493.39	108.36	2,601.75	35.47	105.69	141.16		1,900,129.66		56.46		1,901,315.31
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	25,002.46	27,165.04	23029.58	66,379,402	66,379,402
General Office Building	81,462.99	17,535.63	7251.02	128,670,350	128,670,350
Industrial Park	399.36	142.88	41.89	665,284	665,284
Single Family Housing	182,681.73	192,417.12	167410.53	482,381,997	482,381,997
Total	289,546.54	237,260.67	197,733.02	678,097,033	678,097,033

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.00	7.00	7.00	40.20	19.20	40.60
General Office Building	7.00	7.00	7.00	33.00	48.00	19.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Industrial Park	7.00	7.00	7.00	59.00	28.00	13.00
Single Family Housing	10.00	7.00	7.00	40.20	19.20	40.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
NaturalGas Unmitigated	27.83	239.17	110.85	1.52		0.00	19.23		0.00	19.23		303,646.10		5.82	5.57	305,494.04
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	214367	2.31	19.76	8.41	0.13		0.00	1.60		0.00	1.60		25,219.63		0.48	0.46	25,373.11
General Office Building	221565	2.39	21.72	18.25	0.13		0.00	1.65		0.00	1.65		26,066.42		0.50	0.48	26,225.06
Industrial Park	1718.26	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01		202.15		0.00	0.00	203.38
Single Family Housing	2.14334e+006	23.11	197.52	84.05	1.26		0.00	15.97		0.00	15.97		252,157.91		4.83	4.62	253,692.50
Total		**27.83**	**239.17**	**110.85**	**1.52**		**0.00**	**19.23**		**0.00**	**19.23**		**303,646.11**		**5.81**	**5.56**	**305,494.05**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	214.367	2.31	19.76	8.41	0.13		0.00	1.60		0.00	1.60		25,219.63		0.48	0.46	25,373.11
General Office Building	221.565	2.39	21.72	18.25	0.13		0.00	1.65		0.00	1.65		26,066.42		0.50	0.48	26,225.06
Industrial Park	1.71826	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01		202.15		0.00	0.00	203.38
Single Family Housing	2143.34	23.11	197.52	84.05	1.26		0.00	15.97		0.00	15.97		252,157.91		4.83	4.62	253,692.50
Total		**27.83**	**239.17**	**110.85**	**1.52**		**0.00**	**19.23**		**0.00**	**19.23**		**303,646.11**		**5.81**	**5.56**	**305,494.05**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Unmitigated	3,524.63	133.59	9,479.24	18.40		0.00	1,220.57		0.00	1,220.30	161,479.19	415,334.67		642.49	9.88	593,369.99
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	128.99					0.00	0.00		0.00	0.00						0.00
Consumer Products	903.09					0.00	0.00		0.00	0.00						0.00
Hearth	2,435.62	111.71	7,574.47	18.30		0.00	1,210.02		0.00	1,209.75	161,479.19	411,894.00		639.21	9.88	589,860.59
Landscaping	56.93	21.88	1,904.77	0.10		0.00	10.55		0.00	10.55		3,440.67		3.27		3,509.40
Total	**3,524.63**	**133.59**	**9,479.24**	**18.40**		**0.00**	**1,220.57**		**0.00**	**1,220.30**	**161,479.19**	**415,334.67**		**642.48**	**9.88**	**593,369.99**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	128.99					0.00	0.00		0.00	0.00						0.00
Consumer Products	903.09					0.00	0.00		0.00	0.00						0.00
Hearth	2,435.62	111.71	7,574.47	18.30		0.00	1,210.02		0.00	1,209.75	161,479.19	411,894.00		639.21	9.88	589,860.59
Landscaping	56.93	21.88	1,904.77	0.10		0.00	10.55		0.00	10.55		3,440.67		3.27		3,509.40
Total	**3,524.63**	**133.59**	**9,479.24**	**18.40**		**0.00**	**1,220.57**		**0.00**	**1,220.30**	**161,479.19**	**415,334.67**		**642.48**	**9.88**	**593,369.99**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation