APPENDIX E

Phase 1 Air Modeling Data

				From Project Description						From Traffic Analysis				
PHASE ONE					Residential		Commercial	Industrial/Warehouse	Land Use Type	Size	Daily Trip Rate	Daily Trips		
Key	Phase	Designation	Land Use	Gross Acreage	Unit Count	Net Acreage*	Square Feet	Square Feet		DU or KSF	Trips/DU or KSF	Trips		
PHASE 1 A-A	1 A-A	Phase 1A-A												
N-1	1A-A	Low Density	VLDR	10.30	52	7.21			single-family	52	9.57	493	single	
N-19	1A-A	Medium Density	VMDR	13.30	160	9.975			multi-family	160	6.72	1,075		
N-2	1A-A	Low Density	VLDR	12.00	64	8.4			single-family	64	9.57	609		
N-3	1A-A	Low Density	VLDR	23.00	140	16.1			single-family	140	9.57	1,343		
N-4	1A-A	Low Density	VLDR	27.10	121	18.97			single-family	121	9.57	1,158		
N-5	1A-A	Low Density	VLDR	15.20	62	10.64			single-family	62	9.57	593		
N-6	1A-A	Low Density	VLDR	12.20	56	8.54			single-family	56	9.57	536		
N-7	1A-A	Low Density	VLDR	22.30	96	15.61			single-family	96	9.57	919		
NP-2	1A-A	Neighborhood Parks	VPR	9.00										
OS/CK-1 A	1A-A	Open Space Creek	VOS	11.90										
OS/CK-1 B	1A-A	Open Space Creek	VOS	3.70										
OS/CK-1 C	1A-A	Open Space Creek	VOS	6.50										
OS/CK-2	1A-A	Open Space Creek	VOS	2.80										
OS/GB-1	1A-A	Open Space Greenbelt	VOS	6.10										
OS/GB-2	1A-A	Open Space Greenbelt	VOS	0.80										
N-28	1A-A	K-8	VIN	16.10					Elem. School	217	14.49	3,145		
SPA-1	1A-A	Existing Residential	SPA	5.10										
		PHASE 1 A-A SUBTOTAL		197.40	750			0				9870.76	2.5 years for construction	
				gross acres	units			sq.ft.		DU or KSF	Trips/DU or KSF	Trips	mid-2007-2008-2009	
													(Sutter 2006)	
	URBEMIS	Input Phase 1 A-A		Acreage	Unit Amount									
		Single-Family/Low Density		122.10	590.40	du					9.57	5650.13		
		Multi-Family/Medium Density		13.30	160.00	du					6.72	1075.20		
		Park		9.00	9.00	acres								
		K-8		16.10	217.08	KSF					14.49	3145.44		
		Other (Open Space Creek/Greenbelt)		31.80		acres						9870.76		
		*Does not include grading of existing residential		192.30							21% Internal Trips	2072.86	Based on Traffic Report	
		Demolition	Width	Length	Height	Total Volume (Ft.^3)						7,798	(TJKM 2006)	
		1 Residence	50	50	15	37500								
		1 Residence	35	35	12	14700								
		1 Shed	35	35	20	24500								
		1 Barn	63	63	25	99225								
						175925								
		Earthwork-Onsite	Volume (Yd.^3)											
		L-10	36139											
		L-11	76795											
			112934				(Stantec 2006)							

1A-A

URBEMIS Revised Fleet Calculator

Applicant/Business Name: PCCP Mariposa Lakes, LLC
Project Name: Mariposa Lakes Phase 1 A-A
Project Location: Stockton, CA

192.3 Total Acreage

Max Daily Disturbed * 48.08

Construction Phase	Equipment Type	URBEMIS Value
Demolition	Rubber Tired Loader	4.81
Grading		
	Crawler Tractor	24.04
	Grader	4.81
	Off-Highway Truck	14.42
	Rubber Tired Loader	9.62
	Scraper	4.81
	Tractor/Loader/Backhoe	9.62
Building Construction		
	Other Equipment	14.42
Asphalt	Paver	4.81
	Roller	4.81

*If Total Acreage is equal to or greater than 10 acres, Max Daily Disturbed equals 1/4 of the Total Acreage. Otherwise, Max Daily Disturbed equals the Total Acreage.

To use this spreadsheet:

1. Use this spreadsheet if you do not know specifics of the construction fleet and activity for the construction of your project.
2. Enter the total acreage to be disturbed in the construction of your project.
3. Do NOT change the default construction length in URBEMIS.
4. Enter the "URBEMIS Value" amounts in the corrisponding construction phases of URBEMIS.
   Note: Some values may not be whole numbers. Enter in the exact value, even if not a whole number

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
›ject Name: Mariposa Phase 1 A-A Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

JSTRUCTION EMISSION ESTIMATES

** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
›TALS (lbs/day,unmitigated)	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88
›TALS (lbs/day, mitigated)	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88

** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
›TALS (lbs/day,unmitigated)	33.02	219.21	269.80	0.00	9.87	9.32	0.55
›TALS (lbs/day, mitigated)	33.02	219.21	269.80	0.00	9.87	9.32	0.55

** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
›TALS (lbs/day,unmitigated)	478.63	281.64	406.27	0.02	11.83	10.70	1.13
›TALS (lbs/day, mitigated)	478.63	281.64	406.27	0.02	11.83	10.70	1.13

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
›ject Name: Mariposa Phase 1 A-A Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

JSTRUCTION EMISSION ESTIMATES

** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
)TALS (lbs/day,unmitigated)	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88
)TALS (lbs/day, mitigated)	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88

** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
)TALS (lbs/day,unmitigated)	33.02	219.21	269.80	0.00	9.87	9.32	0.55
)TALS (lbs/day, mitigated)	33.02	219.21	269.80	0.00	9.87	9.32	0.55

** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
)TALS (lbs/day,unmitigated)	478.63	281.64	406.27	0.02	11.83	10.70	1.13
)TALS (lbs/day, mitigated)	478.63	281.64	406.27	0.02	11.83	10.70	1.13

URBEMIS 2002 For Windows 8.7.0

e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
ject Name: Mariposa Phase 1 A-A Construction
ject Location: San Joaquin Valley
Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

STRUCTION EMISSION ESTIMATES

* 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TALS (tpy, unmitigated)	5.16	35.13	41.47	0.00	17.97	1.39	16.58
TALS (tpy, mitigated)	5.16	35.13	41.47	0.00	17.97	1.39	16.58

* 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TALS (tpy, unmitigated)	4.34	28.90	35.13	0.00	1.29	1.22	0.07
TALS (tpy, mitigated)	4.34	28.90	35.13	0.00	1.29	1.22	0.07

* 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TALS (tpy, unmitigated)	16.86	28.49	38.72	0.00	1.26	1.17	0.09
TALS (tpy, mitigated)	16.86	28.49	38.72	0.00	1.26	1.17	0.09

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
›ject Name: Mariposa Phase 1 A-A Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

ıstruction Start Month and Year: July, 2007
ıstruction Duration: 30
:al Land Use Area to be Developed: 192.3 acres
ximum Acreage Disturbed Per Day: 48.08 acres
ıgle Family Units: 590.4 Multi-Family Units: 160
tail/Office/Institutional/Industrial Square Footage: 217000

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2007***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	41.67	-	41.67
f-Road Diesel	6.50	38.63	55.28	-	1.24	1.24	0.00
-Road Diesel	7.30	119.05	26.85	0.25	3.66	3.08	0.58
rker Trips	0.10	0.12	2.20	0.00	0.01	0.00	0.01
Maximum lbs/day	13.90	157.80	84.33	0.25	46.58	4.32	42.26
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	480.80	-	480.80
f-Road Diesel	131.97	870.39	1,076.61	-	34.88	34.88	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.51	0.31	6.57	0.00	0.09	0.01	0.08
Maximum lbs/day	132.48	870.70	1,083.18	0.00	515.77	34.89	480.88
ase 3 - Building Construction							
dg Const Off-Road Diesel	29.93	228.39	221.50	-	10.18	10.18	0.00
dg Const Worker Trips	3.36	2.04	43.15	0.01	0.59	0.04	0.55
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	33.29	230.43	264.65	0.01	10.76	10.21	0.55
Max lbs/day all phases	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88
** 2008***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	29.93	217.31	229.58	-	9.28	9.28	0.00
dg Const Worker Trips	3.09	1.90	40.22	0.00	0.59	0.04	0.55
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	33.02	219.21	269.80	0.00	9.87	9.32	0.55
Max lbs/day all phases	33.02	219.21	269.80	0.00	9.87	9.32	0.55

** 2009***

ıse 1 - Demolition Emissions

;itive Dust	-	-	-	-	0.00	-	0.00
:-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
:ker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1aximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ıse 2 - Site Grading Emissions

;itive Dust	-	-	-	-	0.00	-	0.00
:-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
:ker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1aximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ıse 3 - Building Construction

;g Const Off-Road Diesel	29.93	205.94	237.96	-	8.68	8.68	0.00
;g Const Worker Trips	2.81	1.75	37.09	0.00	0.59	0.04	0.55
:h Coatings Off-Gas	428.64	-	-	-	-	-	-
:h Coatings Worker Trips	2.81	1.75	37.09	0.00	0.59	0.04	0.55
phalt Off-Gas	3.11	-	-	-	-	-	-
phalt Off-Road Diesel	10.76	62.38	91.42	-	1.72	1.72	0.00
phalt On-Road Diesel	0.51	9.79	1.89	0.02	0.22	0.21	0.01
phalt Worker Trips	0.06	0.04	0.81	0.00	0.01	0.00	0.01
1aximum lbs/day	478.63	281.64	406.27	0.02	11.83	10.70	1.13
1ax lbs/day all phases	478.63	281.64	406.27	0.02	11.83	10.70	1.13

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jul '07
ase 1 Duration: 1.5 months
ilding Volume Total (cubic feet): 175925
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Aug '07
ase 2 Duration: 3 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
24	Crawler Tractors	143	0.575	8.0
5	Graders	174	0.575	8.0
14	Off Highway Trucks	417	0.490	8.0
10	Rubber Tired Loaders	165	0.465	8.0
5	Scrapers	313	0.660	8.0
10	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Nov '07
ase 3 Duration: 25.5 months
Start Month/Year for SubPhase Building: Nov '07
SubPhase Building Duration: 25.5 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
14	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Oct '09
SubPhase Architectural Coatings Duration: 2.6 months
Start Month/Year for SubPhase Asphalt: Nov '09
SubPhase Asphalt Duration: 1.3 months
Acres to be Paved: 34
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Pavers	132	0.590	8.0
5	Rollers	114	0.430	8.0

nges made to the default values for Land Use Trip Percentages

: Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/196.8 to 9.57/122.10
: Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/10. to 6.72/13.30

nges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

08/2007 2:54 PM

URBEMIS 2002 For Windows 8.7.0

e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
ject Name: Mariposa Phase 1 A-A Construction
ject Location: San Joaquin Valley
Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

ıstruction Start Month and Year: July, 2007
ıstruction Duration: 30
:al Land Use Area to be Developed: 192.3 acres
:imum Acreage Disturbed Per Day: 48.08 acres
ıgle Family Units: 590.4 Multi-Family Units: 160
:ail/Office/Institutional/Industrial Square Footage: 217000

ISTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2007***							
ıse 1 - Demolition Emissions							
gitive Dust	-	-	-	-	41.67	-	41.67
f-Road Diesel	6.50	38.63	55.28	-	1.24	1.24	0.00
-Road Diesel	7.30	119.05	26.85	0.25	3.66	3.08	0.58
rker Trips	0.10	0.12	2.20	0.00	0.01	0.00	0.01
Maximum lbs/day	13.90	157.80	84.33	0.25	46.58	4.32	42.26
ıse 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	480.80	-	480.80
f-Road Diesel	131.97	870.39	1,076.61	-	34.88	34.88	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.51	0.31	6.57	0.00	0.09	0.01	0.08
Maximum lbs/day	132.48	870.70	1,083.18	0.00	515.77	34.89	480.88
ıse 3 - Building Construction							
dg Const Off-Road Diesel	29.93	228.39	221.50	-	10.18	10.18	0.00
dg Const Worker Trips	3.36	2.04	43.15	0.01	0.59	0.04	0.55
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	33.29	230.43	264.65	0.01	10.76	10.21	0.55
Max lbs/day all phases	132.48	870.70	1,083.18	0.25	515.77	34.89	480.88
** 2008***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	29.93	217.31	229.58	-	9.28	9.28	0.00
dg Const Worker Trips	3.09	1.90	40.22	0.00	0.59	0.04	0.55
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	33.02	219.21	269.80	0.00	9.87	9.32	0.55
Max lbs/day all phases	33.02	219.21	269.80	0.00	9.87	9.32	0.55

** 2009***

ase 1 - Demolition Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 2 - Site Grading Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 3 - Building Construction

dg Const Off-Road Diesel	29.93	205.94	237.96	-	8.68	8.68	0.00
dg Const Worker Trips	2.81	1.75	37.09	0.00	0.59	0.04	0.55
ch Coatings Off-Gas	428.64	-	-	-	-	-	-
ch Coatings Worker Trips	2.81	1.75	37.09	0.00	0.59	0.04	0.55
phalt Off-Gas	3.11	-	-	-	-	-	-
phalt Off-Road Diesel	10.76	62.38	91.42	-	1.72	1.72	0.00
phalt On-Road Diesel	0.51	9.79	1.89	0.02	0.22	0.21	0.01
phalt Worker Trips	0.06	0.04	0.81	0.00	0.01	0.00	0.01
Maximum lbs/day	478.63	281.64	406.27	0.02	11.83	10.70	1.13
Max lbs/day all phases	478.63	281.64	406.27	0.02	11.83	10.70	1.13

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jul '07
ase 1 Duration: 1.5 months
ilding Volume Total (cubic feet): 175925
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Aug '07
ase 2 Duration: 3 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
24	Crawler Tractors	143	0.575	8.0
5	Graders	174	0.575	8.0
14	Off Highway Trucks	417	0.490	8.0
10	Rubber Tired Loaders	165	0.465	8.0
5	Scrapers	313	0.660	8.0
10	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Nov '07
ase 3 Duration: 25.5 months
Start Month/Year for SubPhase Building: Nov '07
SubPhase Building Duration: 25.5 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
14	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Oct '09
SubPhase Architectural Coatings Duration: 2.6 months
Start Month/Year for SubPhase Asphalt: Nov '09
SubPhase Asphalt Duration: 1.3 months
Acres to be Paved: 34
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Pavers	132	0.590	8.0
5	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/196.8 to 9.57/122.10
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/10. to 6.72/13.30

anges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AA.urb
›ject Name: Mariposa Phase 1 A-A Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

ıstruction Start Month and Year: July, 2007
ıstruction Duration: 30
:al Land Use Area to be Developed: 192.3 acres
ximum Acreage Disturbed Per Day: 48.08 acres
ıgle Family Units: 590.4 Multi-Family Units: 160
:ail/Office/Institutional/Industrial Square Footage: 217000

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2007***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.69	-	0.69
f-Road Diesel	0.11	0.64	0.91	-	0.02	0.02	0.00
-Road Diesel	0.12	1.96	0.44	0.00	0.06	0.05	0.01
rker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Total tons/year	0.23	2.60	1.38	0.00	0.77	0.07	0.70
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	15.87	-	15.87
f-Road Diesel	4.36	28.72	35.53	-	1.15	1.15	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.02	0.01	0.20	0.00	0.00	0.00	0.00
Total tons/year	4.38	28.73	35.73	0.00	17.02	1.15	15.87
ase 3 - Building Construction							
dg Const Off-Road Diesel	0.49	3.77	3.65	-	0.17	0.17	0.00
dg Const Worker Trips	0.06	0.03	0.71	0.00	0.01	0.00	0.01
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.55	3.80	4.36	0.00	0.18	0.17	0.01
Total all phases tons/yr	5.16	35.13	41.47	0.00	17.97	1.39	16.58
** 2008***							
.ase 1 - Demolition Emissions							
.gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
.-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
›rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıase 2 - Site Grading Emissions							
;gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
ı-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
›rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıase 3 - Building Construction							
.dg Const Off-Road Diesel	3.95	28.69	30.30	-	1.22	1.22	0.00
.dg Const Worker Trips	0.39	0.21	4.83	0.00	0.08	0.00	0.07
·ch Coatings Off-Gas	0.00	-	-	-	-	-	-
·ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;phalt Off-Gas	0.00	-	-	-	-	-	-
;phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
;phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	4.34	28.90	35.13	0.00	1.29	1.22	0.07
Total all phases tons/yr	4.34	28.90	35.13	0.00	1.29	1.22	0.07

·** 2009***

ıse 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıse 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıse 3 - Building Construction							
dg Const Off-Road Diesel	3.95	27.18	31.41	-	1.15	1.15	0.00
dg Const Worker Trips	0.37	0.23	4.90	0.00	0.08	0.00	0.07
ch Coatings Off-Gas	12.26	-	-	-	-	-	-
ch Coatings Worker Trips	0.08	0.05	1.06	0.00	0.02	0.00	0.02
phalt Off-Gas	0.04	-	-	-	-	-	-
phalt Off-Road Diesel	0.15	0.89	1.31	-	0.02	0.02	0.00
phalt On-Road Diesel	0.01	0.14	0.03	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	16.86	28.49	38.72	0.00	1.26	1.17	0.09
Total all phases tons/yr	16.86	28.49	38.72	0.00	1.26	1.17	0.09

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jul '07
ase 1 Duration: 1.5 months
ilding Volume Total (cubic feet): 175925
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Aug '07
ase 2 Duration: 3 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
24	Crawler Tractors	143	0.575	8.0
5	Graders	174	0.575	8.0
14	Off Highway Trucks	417	0.490	8.0
10	Rubber Tired Loaders	165	0.465	8.0
5	Scrapers	313	0.660	8.0
10	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Nov '07
ase 3 Duration: 25.5 months
Start Month/Year for SubPhase Building: Nov '07
SubPhase Building Duration: 25.5 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
14	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Oct '09
SubPhase Architectural Coatings Duration: 2.6 months
Start Month/Year for SubPhase Asphalt: Nov '09
SubPhase Asphalt Duration: 1.3 months
Acres to be Paved: 34
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
5	Pavers	132	0.590	8.0
5	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/196.8 to 9.57/122.10
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/10. to 6.72/13.30

anges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

PHASE 1 A-B	**1 A-B**	**Phase 1A-B**													
N-13	1A-B	Low Density	VLDR	20.60	113	14.42			single-family	113	9.57	1,079			
N-14	1A-B	Low Density	VLDR	22.40	118	15.68			single-family	118	9.57	1,129			
N-16	1A-B	Medium Density	VMDR	34.00	272	25.5			multi-family	272	6.72	1,830			
N-17	1A-B	Medium Density	VMDR	14.82	145	11.115			multi-family	145	6.72	974			
N-11 A	1 A-B	Low Density	VLDR	32.70	164	22.89			single-family	164	9.57	1,569			
N-11 B	1 A-B	Residential Estate	VRE	6.00	6	5.4			single-family	6	9.57	57			
NP-4	1A-B	Neighborhood Parks	VPR	6.60											
NP-5	1 A-B	Neighborhood Parks	VPR	11.70											
OS/GB-6	1 A-B	Open Space Greenbelt	VOS	3.00											
OS/CK-6	1A-B	Open Space Creek	VOS	2.40											
		PHASE 1 A-B SUBTOTAL		154.22	818			0				6,640	1.6 years for construction		
				gross acres	units			sq.ft.		DU or KSF	Trips/DU or KSF	Trips	2010-late-2011		
	URBEMIS	**Input Phase 1 A-B**		Acreage	Unit Amount								(Sutter 2006)		
		Single-Family/Low Density		81.70	400.78	du					9.57	3835.47			
		Multi-Family/Medium Density		48.82	417.38	du					6.72	2804.76			
		Park		18.30	18.30	acres					0.00	0.00			
		Other (Open Space Creek/Greenbelt)		5.40		acres						6640.24			
				154.22											
										-	21% Internal Trips	1394.45	Based on Traffic Report		
												5,246	(TJKM 2006)		

URBEMIS Revised Fleet Calculator

Applicant/Business Name: PCCP Mariposa Lakes, LLC
Project Name: Mariposa Lakes Phase 1 A-B
Project Location: Stockton, CA

154.22 Total Acreage

Max Daily Disturbed * 38.56

Construction Phase	Equipment Type	URBEMIS Value
Demolition	Rubber Tired Loader	3.86
Grading		
	Crawler Tractor	19.28
	Grader	3.86
	Off-Highway Truck	11.57
	Rubber Tired Loader	7.71
	Scraper	3.86
	Tractor/Loader/Backhoe	7.71
Building Construction		
	Other Equipment	11.57
Asphalt	Paver	3.86
	Roller	3.86

*If Total Acreage is equal to or greater than 10 acres, Max Daily Disturbed equals 1/4 of the Total Acreage. Otherwise, Max Daily Disturbed equals the Total Acreage.

To use this spreadsheet:

1. Use this spreadsheet if you do not know specifics of the construction fleet and activity for the construction of your project.
2. Enter the total acreage to be disturbed in the construction of your project.
3. Do NOT change the default construction length in URBEMIS.
4. Enter the "URBEMIS Value" amounts in the corrisponding construction phases of URBEMIS.
   Note: Some values may not be whole numbers. Enter in the exact value, even if not a whole number

Central Regional Office: 1990 East Gettysburg Avenue Fresno, CA 93726-0244

TEL (559) 230-5800 FAX (559) 230-6064

Version 1.0
Revised: Feb. 21, 2006

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
›ject Name: Mariposa Phase 1 A-B Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

ɴSTRUCTION EMISSION ESTIMATES

** 2010 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
›TALS (lbs/day,unmitigated)	106.70	641.57	909.08	0.01	406.50	20.83	385.67
›TALS (lbs/day, mitigated)	106.70	641.57	909.08	0.01	406.50	20.83	385.67

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
›TALS (lbs/day,unmitigated)	481.91	215.86	317.73	0.02	8.79	7.89	0.90
›TALS (lbs/day, mitigated)	481.91	215.86	317.73	0.02	8.79	7.89	0.90

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
oject Name: Mariposa Phase 1 A-B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

NSTRUCTION EMISSION ESTIMATES

** 2010 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	106.70	641.57	909.08	0.01	406.50	20.83	385.67
OTALS (lbs/day, mitigated)	106.70	641.57	909.08	0.01	406.50	20.83	385.67

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	481.91	215.86	317.73	0.02	8.79	7.89	0.90
OTALS (lbs/day, mitigated)	481.91	215.86	317.73	0.02	8.79	7.89	0.90

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
›ject Name: Mariposa Phase 1 A-B Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

NSTRUCTION EMISSION ESTIMATES

** 2010 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
)TALS (tpy, unmitigated)	5.37	32.49	45.84	0.00	10.55	1.17	9.38
)TALS (tpy, mitigated)	5.37	32.49	45.84	0.00	10.55	1.17	9.38

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
)TALS (tpy, unmitigated)	11.19	14.45	20.69	0.00	0.61	0.56	0.05
)TALS (tpy, mitigated)	11.19	14.45	20.69	0.00	0.61	0.56	0.05

URBEMIS 2002 For Windows 8.7.0

le Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
oject Name: Mariposa Phase 1 A-B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

nstruction Start Month and Year: January, 2010
nstruction Duration: 20
tal Land Use Area to be Developed: 154.22 acres
ximum Acreage Disturbed Per Day: 38.56 acres
ngle Family Units: 400.78 Multi-Family Units: 417.388
tail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2010***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	385.60	-	385.60
f-Road Diesel	105.86	639.92	890.62	-	20.79	20.79	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.84	1.65	18.46	0.01	0.11	0.04	0.07
Maximum lbs/day	106.70	641.57	909.08	0.01	406.50	20.83	385.67
ase 3 - Building Construction							
dg Const Off-Road Diesel	24.02	156.35	197.42	-	6.24	6.24	0.00
dg Const Worker Trips	2.03	1.27	27.13	0.00	0.47	0.03	0.44
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	26.04	157.62	224.55	0.00	6.71	6.27	0.44
Max lbs/day all phases	106.70	641.57	909.08	0.01	406.50	20.83	385.67
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	24.02	156.35	197.42	-	6.24	6.24	0.00
dg Const Worker Trips	2.03	1.27	27.13	0.00	0.47	0.03	0.44
ch Coatings Off-Gas	441.72	-	-	-	-	-	-
ch Coatings Worker Trips	1.82	0.87	22.29	0.00	0.47	0.03	0.44
phalt Off-Gas	3.35	-	-	-	-	-	-
phalt Off-Road Diesel	8.63	50.06	73.37	-	1.38	1.38	0.00
phalt On-Road Diesel	0.50	7.69	1.86	0.02	0.22	0.21	0.01
phalt Worker Trips	0.04	0.02	0.51	0.00	0.01	0.00	0.01
Maximum lbs/day	481.91	215.86	317.73	0.02	8.79	7.89	0.90
Max lbs/day all phases	481.91	215.86	317.73	0.02	8.79	7.89	0.90

ase 1 - Demolition Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Jan '10
ase 2 Duration: 2.2 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
19	Crawler Tractors	143	0.575	8.0
4	Graders	174	0.575	8.0
12	Off Highway Trucks	417	0.490	8.0
8	Rubber Tired Loaders	165	0.465	8.0
4	Scrapers	313	0.660	8.0
8	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Mar '10
ase 3 Duration: 17.8 months
Start Month/Year for SubPhase Building: Mar '10
SubPhase Building Duration: 17.8 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
12	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jul '11
SubPhase Architectural Coatings Duration: 1.8 months
Start Month/Year for SubPhase Asphalt: Aug '11
SubPhase Asphalt Duration: 0.9 months
Acres to be Paved: 25.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
4	Pavers	132	0.590	8.0
4	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/133.59 to 9.57/81.7
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/26.09 to 6.72/48.82

anges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
ject Name: Mariposa Phase 1 A-B Construction
ject Location: San Joaquin Valley
Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

.struction Start Month and Year: January, 2010
.struction Duration: 20
.al Land Use Area to be Developed: 154.22 acres
:imum Acreage Disturbed Per Day: 38.56 acres
ıgle Family Units: 400.78 Multi-Family Units: 417.388
:ail/Office/Institutional/Industrial Square Footage: 0

ISTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
·* 2010***							
ıse 1 - Demolition Emissions							
;itive Dust	-	-	-	-	0.00	-	0.00
:-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
·Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
:ker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
laximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıse 2 - Site Grading Emissions							
;itive Dust	-	-	-	-	385.60	-	385.60
:-Road Diesel	105.86	639.92	890.62	-	20.79	20.79	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
:ker Trips	0.84	1.65	18.46	0.01	0.11	0.04	0.07
laximum lbs/day	106.70	641.57	909.08	0.01	406.50	20.83	385.67
ıse 3 - Building Construction							
ıg Const Off-Road Diesel	24.02	156.35	197.42	-	6.24	6.24	0.00
ıg Const Worker Trips	2.03	1.27	27.13	0.00	0.47	0.03	0.44
:h Coatings Off-Gas	0.00	-	-	-	-	-	-
:h Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ɔhalt Off-Gas	0.00	-	-	-	-	-	-
ɔhalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
ɔhalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ɔhalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
laximum lbs/day	26.04	157.62	224.55	0.00	6.71	6.27	0.44
lax lbs/day all phases	106.70	641.57	909.08	0.01	406.50	20.83	385.67
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
laximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
laximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	24.02	156.35	197.42	-	6.24	6.24	0.00
dg Const Worker Trips	2.03	1.27	27.13	0.00	0.47	0.03	0.44
ch Coatings Off-Gas	441.72	-	-	-	-	-	-
ch Coatings Worker Trips	1.82	0.87	22.29	0.00	0.47	0.03	0.44
phalt Off-Gas	3.35	-	-	-	-	-	-
phalt Off-Road Diesel	8.63	50.06	73.37	-	1.38	1.38	0.00
phalt On-Road Diesel	0.50	7.69	1.86	0.02	0.22	0.21	0.01
phalt Worker Trips	0.04	0.02	0.51	0.00	0.01	0.00	0.01
Maximum lbs/day	481.91	215.86	317.73	0.02	8.79	7.89	0.90
Max lbs/day all phases	481.91	215.86	317.73	0.02	8.79	7.89	0.90

ıse 1 - Demolition Assumptions: Phase Turned OFF

ıse 2 - Site Grading Assumptions
ırt Month/Year for Phase 2: Jan '10
ıse 2 Duration: 2.2 months
-Road Truck Travel (VMT): 0
:-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
19	Crawler Tractors	143	0.575	8.0
4	Graders	174	0.575	8.0
12	Off Highway Trucks	417	0.490	8.0
8	Rubber Tired Loaders	165	0.465	8.0
4	Scrapers	313	0.660	8.0
8	Tractor/Loaders/Backhoes	79	0.465	8.0

ıse 3 - Building Construction Assumptions
ırt Month/Year for Phase 3: Mar '10
ıse 3 Duration: 17.8 months
Start Month/Year for SubPhase Building: Mar '10
SubPhase Building Duration: 17.8 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
12	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jul '11
SubPhase Architectural Coatings Duration: 1.8 months
Start Month/Year for SubPhase Asphalt: Aug '11
SubPhase Asphalt Duration: 0.9 months
Acres to be Paved: 25.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
4	Pavers	132	0.590	8.0
4	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/133.59 to 9.57/81.7
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/26.09 to 6.72/48.82

anges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

le Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1AB.urb
oject Name: Mariposa Phase 1 A-B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

nstruction Start Month and Year: January, 2010
nstruction Duration: 20
tal Land Use Area to be Developed: 154.22 acres
ximum Acreage Disturbed Per Day: 38.56 acres
ngle Family Units: 400.78 Multi-Family Units: 417.388
tail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2010***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	9.33	-	9.33
f-Road Diesel	2.56	15.49	21.55	-	0.50	0.50	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.02	0.04	0.40	0.00	0.00	0.00	0.00
Total tons/year	2.58	15.53	21.95	0.00	9.83	0.50	9.33
ase 3 - Building Construction							
dg Const Off-Road Diesel	2.59	16.85	21.28	-	0.67	0.67	0.00
dg Const Worker Trips	0.20	0.11	2.61	0.00	0.05	0.00	0.05
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	2.79	16.96	23.89	0.00	0.72	0.67	0.05
Total all phases tons/yr	5.37	32.49	45.84	0.00	10.55	1.17	9.38
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	2.11	13.76	17.37	-	0.55	0.55	0.00
dg Const Worker Trips	0.17	0.09	2.12	0.00	0.04	0.00	0.04
ch Coatings Off-Gas	8.75	-	-	-	-	-	-
ch Coatings Worker Trips	0.04	0.02	0.44	0.00	0.01	0.00	0.01
phalt Off-Gas	0.03	-	-	-	-	-	-
phalt Off-Road Diesel	0.09	0.50	0.73	-	0.01	0.01	0.00
phalt On-Road Diesel	0.00	0.08	0.02	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	11.19	14.45	20.69	0.00	0.61	0.56	0.05
Total all phases tons/yr	11.19	14.45	20.69	0.00	0.61	0.56	0.05

ase 1 - Demolition Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Jan '10
ase 2 Duration: 2.2 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
19	Crawler Tractors	143	0.575	8.0
4	Graders	174	0.575	8.0
12	Off Highway Trucks	417	0.490	8.0
8	Rubber Tired Loaders	165	0.465	8.0
4	Scrapers	313	0.660	8.0
8	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Mar '10
ase 3 Duration: 17.8 months
Start Month/Year for SubPhase Building: Mar '10
SubPhase Building Duration: 17.8 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
12	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jul '11
SubPhase Architectural Coatings Duration: 1.8 months
Start Month/Year for SubPhase Asphalt: Aug '11
SubPhase Asphalt Duration: 0.9 months
Acres to be Paved: 25.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
4	Pavers	132	0.590	8.0
4	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/133.59 to 9.57/81.7
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/26.09 to 6.72/48.82

anges made to the default values for Construction

chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

PHASE 1 B		**Phase 1B**													
L-1	1B	Lakes	L	33.50											
L-2	1B	Lakes	L	18.00											
N-10	1B	Low Density	VLDR	32.90	103	23.03			single-family	103	9.57	986			
N-12 A	1B	Low Density	VLDR	45.60	135	31.92			single-family	135	9.57	1,292			
N-12 B	1B	Residential Estate	VRE	5.60	5	5.04			single-family	5	9.57	48			
N-15	1B	Low Density	VLDR	23.30	111	16.31			single-family	111	9.57	1,065			
N-18	1B	High Density	VHDR	11.80	271	9.44			condo	271	5.86	1,590			
N-8	1B	Low Density	VLDR	17.10	56	11.97			single-family	56	9.57	536			
N-9	1B	Low Density	VLDR	23.30	84	16.31			single-family	84	9.57	804			
NP-6	1B	Neighborhood Parks	VPR	5.00											
NP-1	1B	Neighborhood Parks	VPR	5.80											
OS/CK-16	1B	Open Space Creek	VOS	0.20											
OS/CK-15	1B	Open Space Creek	VOS	25.80											
		PHASE 1 B SUBTOTAL		247.90	766							6,321	16 months for construction		
				gross acres	units					DU or KSF	Trips/DU or KSF	Trips	late-2011, 2012		
	URBEMIS	**Input Phase 1 B**		Acreage	Unit Amount										
		Single-Family/Low Density		147.80	494.30	du					9.57	4730.41			
		High Density/Condo		11.80	271.40	du					5.86	1590.40			
		Park		10.80	10.80	acres					0.00	0.00			
		Lakes		51.50	51.50	acres					0.00	0.00			
		Other (Open Space Creek/Greenbelt)		26.00								6320.81			
				247.90							21% Internal Trips	1327.37	Based on Traffic Report		
												4,993	(TJKM 2006)		
		Earthwork-Onsite	**Volume (Yd.^3)**												
		L-1	758912												
		L-2	406560												
			1165472				(Stantec 2006)								

URBEMIS Revised Fleet Calculator

Applicant/Business Name: PCCP Mariposa Lakes, LLC
Project Name: Mariposa Lakes Phase 1 B
Project Location: Stockton, CA

247.9 Total Acreage

Max Daily Disturbed * 61.98

Construction Phase	Equipment Type	URBEMIS Value
Demolition	Rubber Tired Loader	6.20
Grading		
	Crawler Tractor	30.99
	Grader	6.20
	Off-Highway Truck	18.59
	Rubber Tired Loader	12.40
	Scraper	6.20
	Tractor/Loader/Backhoe	12.40
Building Construction		
	Other Equipment	18.59
Asphalt	Paver	6.20
	Roller	6.20

*If Total Acreage is equal to or greater than 10 acres, Max Daily Disturbed equals 1/4 of the Total Acreage. Otherwise, Max Daily Disturbed equals the Total Acreage.

To use this spreadsheet:

1. Use this spreadsheet if you do not know specifics of the construction fleet and activity for the construction of your project.
2. Enter the total acreage to be disturbed in the construction of your project.
3. Do NOT change the default construction length in URBEMIS.
4. Enter the "URBEMIS Value" amounts in the corrisponding construction phases of URBEMIS.
   Note: Some values may not be whole numbers. Enter in the exact value, even if not a whole number

Central Regional Office: 1990 East Gettysburg Avenue Fresno, CA 93726-0244

TEL (559) 230-5800 FAX (559) 230-6064

Version 1.0
Revised: Feb. 21, 2006

URBEMIS 2002 For Windows 8.7.0

le Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
oject Name: Mariposa Phase 1 B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

NSTRUCTION EMISSION ESTIMATES

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
OTALS (lbs/day, mitigated)	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91

** 2012 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	655.31	352.28	495.73	0.04	13.65	12.71	0.94
OTALS (lbs/day, mitigated)	655.31	352.28	495.73	0.04	13.65	12.71	0.94

URBEMIS 2002 For Windows 8.7.0

le Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
oject Name: Mariposa Phase 1 B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

NSTRUCTION EMISSION ESTIMATES

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
OTALS (lbs/day, mitigated)	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91

** 2012 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	655.31	352.28	495.73	0.04	13.65	12.71	0.94
OTALS (lbs/day, mitigated)	655.31	352.28	495.73	0.04	13.65	12.71	0.94

URBEMIS 2002 For Windows 8.7.0

le Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
oject Name: Mariposa Phase 1 B Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

NSTRUCTION EMISSION ESTIMATES

** 2011 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	4.37	26.50	37.26	0.00	13.18	0.90	12.28
OTALS (tpy, mitigated)	4.37	26.50	37.26	0.00	13.18	0.90	12.28

** 2012 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	14.65	34.09	46.62	0.00	1.41	1.34	0.07
OTALS (tpy, mitigated)	14.65	34.09	46.62	0.00	1.41	1.34	0.07

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
›ject Name: Mariposa Phase 1 B Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

ıstruction Start Month and Year: September, 2011
ıstruction Duration: 16
:al Land Use Area to be Developed: 247.9 acres
:imum Acreage Disturbed Per Day: 61.98 acres
ıgle Family Units: 494.3 Multi-Family Units: 271
:ail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	619.80	-	619.80
f-Road Diesel	170.13	1,028.37	1,431.25	-	33.42	33.42	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	1.36	1.72	31.82	0.02	0.17	0.06	0.11
Maximum lbs/day	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
ase 3 - Building Construction							
dg Const Off-Road Diesel	38.59	251.21	317.20	-	10.03	10.03	0.00
dg Const Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	40.68	252.52	345.24	0.00	10.51	10.06	0.45
Max lbs/day all phases	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
** 2012***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	38.59	251.21	317.20	-	10.03	10.03	0.00
dg Const Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
ch Coatings Off-Gas	591.10	-	-	-	-	-	-
ch Coatings Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
phalt Off-Gas	6.52	-	-	-	-	-	-
phalt Off-Road Diesel	13.86	80.41	117.84	-	2.22	2.22	0.00
phalt On-Road Diesel	0.98	18.00	3.62	0.04	0.43	0.40	0.03
phalt Worker Trips	0.07	0.05	0.99	0.00	0.02	0.00	0.02
Maximum lbs/day	655.31	352.28	495.73	0.04	13.65	12.71	0.94
Max lbs/day all phases	655.31	352.28	495.73	0.04	13.65	12.71	0.94

ase 1 - Demolition Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Sep '11
ase 2 Duration: 1.8 months
-Road Truck Travel (VMT): 0
-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
31	Crawler Tractors	143	0.575	8.0
6	Graders	174	0.575	8.0
19	Off Highway Trucks	417	0.490	8.0
12	Rubber Tired Loaders	165	0.465	8.0
6	Scrapers	313	0.660	8.0
12	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Oct '11
ase 3 Duration: 14.2 months
Start Month/Year for SubPhase Building: Oct '11
SubPhase Building Duration: 14.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
19	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Nov '12
SubPhase Architectural Coatings Duration: 1.4 months
Start Month/Year for SubPhase Asphalt: Dec '12
SubPhase Asphalt Duration: 0.7 months
Acres to be Paved: 38.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
6	Pavers	132	0.590	8.0
6	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/164.77 to 9.57/147.80
e Trip Rate and/or Acreage values for Apartments mid rise
ave changed from the defaults 5.76/7.13 to 5.86/11.80

anges made to the default values for Construction

te Grading Miles/Round Trip changed from 20 to 3
chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
›ject Name: Mariposa Phase 1 B Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

ıstruction Start Month and Year: September, 2011
ıstruction Duration: 16
:al Land Use Area to be Developed: 247.9 acres
:imum Acreage Disturbed Per Day: 61.98 acres
ıgle Family Units: 494.3 Multi-Family Units: 271
:ail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	619.80	-	619.80
f-Road Diesel	170.13	1,028.37	1,431.25	-	33.42	33.42	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	1.36	1.72	31.82	0.02	0.17	0.06	0.11
Maximum lbs/day	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
ase 3 - Building Construction							
dg Const Off-Road Diesel	38.59	251.21	317.20	-	10.03	10.03	0.00
dg Const Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	40.68	252.52	345.24	0.00	10.51	10.06	0.45
Max lbs/day all phases	171.49	1,030.09	1,463.07	0.02	653.39	33.48	619.91
** 2012***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	38.59	251.21	317.20	-	10.03	10.03	0.00
dg Const Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
ch Coatings Off-Gas	591.10	-	-	-	-	-	-
ch Coatings Worker Trips	2.09	1.31	28.04	0.00	0.48	0.03	0.45
phalt Off-Gas	6.52	-	-	-	-	-	-
phalt Off-Road Diesel	13.86	80.41	117.84	-	2.22	2.22	0.00
phalt On-Road Diesel	0.98	18.00	3.62	0.04	0.43	0.40	0.03
phalt Worker Trips	0.07	0.05	0.99	0.00	0.02	0.00	0.02
Maximum lbs/day	655.31	352.28	495.73	0.04	13.65	12.71	0.94
Max lbs/day all phases	655.31	352.28	495.73	0.04	13.65	12.71	0.94

se 1 - Demolition Assumptions: Phase Turned OFF

se 2 - Site Grading Assumptions
rt Month/Year for Phase 2: Sep '11
se 2 Duration: 1.8 months
Road Truck Travel (VMT): 0
-Road Equipment

o.	Type	Horsepower	Load Factor	Hours/Day
31	Crawler Tractors	143	0.575	8.0
6	Graders	174	0.575	8.0
19	Off Highway Trucks	417	0.490	8.0
12	Rubber Tired Loaders	165	0.465	8.0
6	Scrapers	313	0.660	8.0
12	Tractor/Loaders/Backhoes	79	0.465	8.0

se 3 - Building Construction Assumptions
rt Month/Year for Phase 3: Oct '11
se 3 Duration: 14.2 months
tart Month/Year for SubPhase Building: Oct '11
ubPhase Building Duration: 14.2 months
ff-Road Equipment

lo.	Type	Horsepower	Load Factor	Hours/Day
19	Other Equipment	190	0.620	8.0

tart Month/Year for SubPhase Architectural Coatings: Nov '12
ubPhase Architectural Coatings Duration: 1.4 months
tart Month/Year for SubPhase Asphalt: Dec '12
ubPhase Asphalt Duration: 0.7 months
cres to be Paved: 38.3
ff-Road Equipment

lo.	Type	Horsepower	Load Factor	Hours/Day
6	Pavers	132	0.590	8.0
6	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/164.77 to 9.57/147.80
e Trip Rate and/or Acreage values for Apartments mid rise
ave changed from the defaults 5.76/7.13 to 5.86/11.80

anges made to the default values for Construction

te Grading Miles/Round Trip changed from 20 to 3
chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

.e Name: H:\Projects1_5\mariposa\AQ Modeling\MariposaPhase1B.urb
›ject Name: Mariposa Phase 1 B Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

ıstruction Start Month and Year: September, 2011
ıstruction Duration: 16
:al Land Use Area to be Developed: 247.9 acres
:imum Acreage Disturbed Per Day: 61.98 acres
ıgle Family Units: 494.3 Multi-Family Units: 271
:ail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2011***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	12.27	-	12.27
f-Road Diesel	3.37	20.36	28.34	-	0.66	0.66	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.02	0.03	0.56	0.00	0.00	0.00	0.00
Total tons/year	3.39	20.39	28.90	0.00	12.93	0.66	12.27
ase 3 - Building Construction							
dg Const Off-Road Diesel	0.93	6.08	7.68	-	0.24	0.24	0.00
dg Const Worker Trips	0.05	0.03	0.68	0.00	0.01	0.00	0.01
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.98	6.11	8.36	0.00	0.25	0.24	0.01
Total all phases tons/yr	4.37	26.50	37.26	0.00	13.18	0.90	12.28
** 2012***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	5.09	33.16	41.87	-	1.32	1.32	0.00
dg Const Worker Trips	0.26	0.15	3.37	0.00	0.06	0.00	0.06
ch Coatings Off-Gas	9.10	-	-	-	-	-	-
ch Coatings Worker Trips	0.03	0.02	0.43	0.00	0.01	0.00	0.01
phalt Off-Gas	0.05	-	-	-	-	-	-
phalt Off-Road Diesel	0.11	0.62	0.91	-	0.02	0.02	0.00
phalt On-Road Diesel	0.01	0.14	0.03	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total tons/year	14.65	34.09	46.62	0.00	1.41	1.34	0.07
Total all phases tons/yr	14.65	34.09	46.62	0.00	1.41	1.34	0.07

ase 1 - Demolition Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Sep '11
ase 2 Duration: 1.8 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
31	Crawler Tractors	143	0.575	8.0
6	Graders	174	0.575	8.0
19	Off Highway Trucks	417	0.490	8.0
12	Rubber Tired Loaders	165	0.465	8.0
6	Scrapers	313	0.660	8.0
12	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Oct '11
ase 3 Duration: 14.2 months
Start Month/Year for SubPhase Building: Oct '11
SubPhase Building Duration: 14.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
19	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Nov '12
SubPhase Architectural Coatings Duration: 1.4 months
Start Month/Year for SubPhase Asphalt: Dec '12
SubPhase Asphalt Duration: 0.7 months
Acres to be Paved: 38.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
6	Pavers	132	0.590	8.0
6	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/164.77 to 9.57/147.80
e Trip Rate and/or Acreage values for Apartments mid rise
ave changed from the defaults 5.76/7.13 to 5.86/11.80

anges made to the default values for Construction

te Grading Miles/Round Trip changed from 20 to 3
chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

	URBEMIS	Input Phase 1 C		Acreage	Unit Amount										
		Single-Family/Low Density		59.00	64.00	du					9.57	612.48			
		Multi-Family/Medium Density		161.40	1633.88	du					6.72	10979.70			
		High Density/Condo		18.80	432.40	du					5.86	2533.86			
		Park		30.60	30.60	acres					0.00	0.00			
		K-8		16.90	227.86	KSF					14.49	3301.73			
		Lakes		17.70	17.70	acres					0.00	0.00			
		Sports Facility		24.00	24.00	acres					0.00	0.00			
54.60		Library		2.00	2.00	acres					0.00	0.00			
		Commercial		0.00	643.00	KSF					42.94	27610.42			
		Industrial		9.80	171.00	KSF					1.50	256.50			
		Other (Open Space Creek/Greenbelt)		25.10								45294.70			
61.20		Public Safety/Amtrak		18.40							21% Internal Trips	9511.89	Based on Traffic Report		
		*Does not include Open Space Easement		383.70								**35,783**			
				400.70											
		Demolition	**Width**	**Length**	**Height**	**Total Volume (Ft.^3)**									
		1 Residence	35	35	12	14700									
		1 Greenhouse	63	63	25	99225									
		1 Barn	35	35	20	24500									
						138425									
		Earthwork-Onsite	**Volume (Yd.^3)**												
		L-3	327507												
			327507				(Stantec 2006)								
PHASE ONE SUBTOTAL					**4,465**		**642,510**	**170,755**				**68,127**			
				gross acres	**units**		**sq.ft.**	**sq.ft.**				Trips			
									single	1,549.48		14,828.49			
									multi	2,211.26		14,859.67			
									condo	703.80		4,124.27			
										4,464.54		33,812.43			
									industrial, commercial, school, and mixed			**68,127**	9.1		

URBEMIS Revised Fleet Calculator

Applicant/Business Name:	PCCP Mariposa Lakes, LLC
Project Name:	Mariposa Lakes Phase 1 C
Project Location:	Stockton, CA

383.7	Total Acreage	
	Max Daily Disturbed *	95.93

Construction Phase	Equipment Type	URBEMIS Value
Demolition	Rubber Tired Loader	9.59
Grading		
	Crawler Tractor	47.96
	Grader	9.59
	Off-Highway Truck	28.78
	Rubber Tired Loader	19.19
	Scraper	9.59
	Tractor/Loader/Backhoe	19.19
Building Construction		
	Other Equipment	28.78
Asphalt	Paver	9.59
	Roller	9.59

*If Total Acreage is equal to or greater than 10 acres, Max Daily Disturbed equals 1/4 of the Total Acreage. Otherwise, Max Daily Disturbed equals the Total Acreage.

To use this spreadsheet:

1. Use this spreadsheet if you do not know specifics of the construction fleet and activity for the construction of your project.
2. Enter the total acreage to be disturbed in the construction of your project.
3. Do NOT change the default construction length in URBEMIS.
4. Enter the "URBEMIS Value" amounts in the corrisponding construction phases of URBEMIS.
   Note: Some values may not be whole numbers. Enter in the exact value, even if not a whole number

Central Regional Office: 1990 East Gettysburg Avenue Fresno, CA 93726-0244

TEL (559) 230-5800 FAX (559) 230-6064

Version 1.0
Revised: Feb. 21, 2006

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
oject Name: Mariposa Phase 1 C Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

NSTRUCTION EMISSION ESTIMATES

** 2013 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47
OTALS (lbs/day, mitigated)	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47

** 2014 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	65.43	392.48	567.28	0.01	16.84	15.61	1.23
OTALS (lbs/day, mitigated)	65.43	392.48	567.28	0.01	16.84	15.61	1.23

** 2015 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	63.23	391.12	541.02	0.01	16.84	15.61	1.23
OTALS (lbs/day, mitigated)	63.23	391.12	541.02	0.01	16.84	15.61	1.23

** 2016 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	849.55	523.56	775.80	0.05	21.78	19.28	2.50
OTALS (lbs/day, mitigated)	849.55	523.56	775.80	0.05	21.78	19.28	2.50

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
oject Name: Mariposa Phase 1 C Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

NSTRUCTION EMISSION ESTIMATES

** 2013 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47
OTALS (lbs/day, mitigated)	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47

** 2014 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	65.43	392.48	567.28	0.01	16.84	15.61	1.23
OTALS (lbs/day, mitigated)	65.43	392.48	567.28	0.01	16.84	15.61	1.23

** 2015 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	63.23	391.12	541.02	0.01	16.84	15.61	1.23
OTALS (lbs/day, mitigated)	63.23	391.12	541.02	0.01	16.84	15.61	1.23

** 2016 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (lbs/day,unmitigated)	849.55	523.56	775.80	0.05	21.78	19.28	2.50
OTALS (lbs/day, mitigated)	849.55	523.56	775.80	0.05	21.78	19.28	2.50

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
oject Name: Mariposa Phase 1 C Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

NSTRUCTION EMISSION ESTIMATES

** 2013 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	16.32	99.87	137.79	0.01	46.65	3.42	43.23
OTALS (tpy, mitigated)	16.32	99.87	137.79	0.01	46.65	3.42	43.23

** 2014 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	8.60	51.74	73.98	0.00	2.22	2.06	0.16
OTALS (tpy, mitigated)	8.60	51.74	73.98	0.00	2.22	2.06	0.16

** 2015 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	8.35	51.63	71.41	0.00	2.22	2.06	0.16
OTALS (tpy, mitigated)	8.35	51.63	71.41	0.00	2.22	2.06	0.16

** 2016 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	31.71	19.71	28.94	0.00	0.84	0.74	0.10
OTALS (tpy, mitigated)	31.71	19.71	28.94	0.00	0.84	0.74	0.10

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
oject Name: Mariposa Phase 1 C Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

nstruction Start Month and Year: January, 2013
nstruction Duration: 40
tal Land Use Area to be Developed: 383.7 acres
ximum Acreage Disturbed Per Day: 95.93 acres
ngle Family Units: 64 Multi-Family Units: 2066.28
tail/Office/Institutional/Industrial Square Footage: 1128980

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2013***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	41.67	-	41.67
f-Road Diesel	12.97	75.20	110.21	-	2.07	2.07	0.00
-Road Diesel	5.65	104.11	20.92	0.25	2.90	2.32	0.58
rker Trips	0.15	0.30	3.31	0.00	0.02	0.01	0.01
Maximum lbs/day	18.77	179.61	134.44	0.25	46.66	4.40	42.26
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	959.30	-	959.30
f-Road Diesel	263.30	1,591.55	2,215.07	-	51.71	51.71	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.78	0.49	10.39	0.00	0.18	0.01	0.17
Maximum lbs/day	264.08	1,592.04	2,225.46	0.00	1,011.19	51.72	959.47
ase 3 - Building Construction							
dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	5.69	3.57	76.22	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	65.43	392.48	567.28	0.01	16.84	15.61	1.23
Max lbs/day all phases	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47
** 2014***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	5.69	3.57	76.22	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	65.43	392.48	567.28	0.01	16.84	15.61	1.23
Max lbs/day all phases	65.43	392.48	567.28	0.01	16.84	15.61	1.23

*** 2015***

ase 1 - Demolition Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 2 - Site Grading Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 3 - Building Construction

dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	63.23	391.12	541.02	0.01	16.84	15.61	1.23

Max lbs/day all phases	63.23	391.12	541.02	0.01	16.84	15.61	1.23

** 2016***

ase 1 - Demolition Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 2 - Site Grading Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 3 - Building Construction

dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	756.85	-	-	-	-	-	-
ch Coatings Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
phalt Off-Gas	4.08	-	-	-	-	-	-
phalt Off-Road Diesel	21.44	124.38	182.28	-	3.43	3.43	0.00
phalt On-Road Diesel	0.40	5.81	1.58	0.03	0.17	0.15	0.02
phalt Worker Trips	0.07	0.04	0.97	0.00	0.02	0.00	0.02
Maximum lbs/day	849.55	523.56	775.80	0.05	21.78	19.28	2.50

Max lbs/day all phases	849.55	523.56	775.80	0.05	21.78	19.28	2.50

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jan '13
ase 1 Duration: 2 months
ilding Volume Total (cubic feet): 138450
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Mar '13
ase 2 Duration: 4 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
48	Crawler Tractors	143	0.575	8.0
10	Graders	174	0.575	8.0
29	Off Highway Trucks	417	0.490	8.0
19	Rubber Tired Loaders	165	0.465	8.0

10	Scrapers	313	0.660	8.0
19	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Jul '13
ase 3 Duration: 34 months
Start Month/Year for SubPhase Building: Jul '13
SubPhase Building Duration: 34 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
29	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jan '16
SubPhase Architectural Coatings Duration: 3.4 months
Start Month/Year for SubPhase Asphalt: Mar '16
SubPhase Asphalt Duration: 1.7 months
Acres to be Paved: 58.2
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Pavers	132	0.590	8.0
10	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/21.33 to 9.57/59
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/102.12 to 6.72/161.40
e Trip Rate and/or Acreage values for Apartments mid rise
ave changed from the defaults 5.76/11.38 to 5.86/18.80

anges made to the default values for Construction

te Grading Miles/Round Trip changed from 20 to 3
chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

.e Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
›ject Name: Mariposa Phase 1 C Construction
›ject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

ıstruction Start Month and Year: January, 2013
ıstruction Duration: 40
:al Land Use Area to be Developed: 383.7 acres
ximum Acreage Disturbed Per Day: 95.93 acres
ıgle Family Units: 64 Multi-Family Units: 2066.28
:ail/Office/Institutional/Industrial Square Footage: 1128980

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2013***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	41.67	-	41.67
f-Road Diesel	12.97	75.20	110.21	-	2.07	2.07	0.00
-Road Diesel	5.65	104.11	20.92	0.25	2.90	2.32	0.58
rker Trips	0.15	0.30	3.31	0.00	0.02	0.01	0.01
Maximum lbs/day	18.77	179.61	134.44	0.25	46.66	4.40	42.26
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	959.30	-	959.30
f-Road Diesel	263.30	1,591.55	2,215.07	-	51.71	51.71	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.78	0.49	10.39	0.00	0.18	0.01	0.17
Maximum lbs/day	264.08	1,592.04	2,225.46	0.00	1,011.19	51.72	959.47
ase 3 - Building Construction							
dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	5.69	3.57	76.22	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	65.43	392.48	567.28	0.01	16.84	15.61	1.23
Max lbs/day all phases	264.08	1,592.04	2,225.46	0.25	1,011.19	51.72	959.47
** 2014***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	5.69	3.57	76.22	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	65.43	392.48	567.28	0.01	16.84	15.61	1.23
Max lbs/day all phases	65.43	392.48	567.28	0.01	16.84	15.61	1.23

** 2015***

ase 1 - Demolition Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 2 - Site Grading Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
cker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 3 - Building Construction

dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	63.23	391.12	541.02	0.01	16.84	15.61	1.23
Max lbs/day all phases	63.23	391.12	541.02	0.01	16.84	15.61	1.23

** 2016***

ase 1 - Demolition Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 2 - Site Grading Emissions

gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ase 3 - Building Construction

dg Const Off-Road Diesel	59.74	388.91	491.07	-	15.53	15.53	0.00
dg Const Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
ch Coatings Off-Gas	756.85	-	-	-	-	-	-
ch Coatings Worker Trips	3.49	2.21	49.95	0.01	1.31	0.08	1.23
phalt Off-Gas	4.08	-	-	-	-	-	-
phalt Off-Road Diesel	21.44	124.38	182.28	-	3.43	3.43	0.00
phalt On-Road Diesel	0.40	5.81	1.58	0.03	0.17	0.15	0.02
phalt Worker Trips	0.07	0.04	0.97	0.00	0.02	0.00	0.02
Maximum lbs/day	849.55	523.56	775.80	0.05	21.78	19.28	2.50
Max lbs/day all phases	849.55	523.56	775.80	0.05	21.78	19.28	2.50

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jan '13
ase 1 Duration: 2 months
ilding Volume Total (cubic feet): 138450
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Mar '13
ase 2 Duration: 4 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
48	Crawler Tractors	143	0.575	8.0
10	Graders	174	0.575	8.0
29	Off Highway Trucks	417	0.490	8.0
19	Rubber Tired Loaders	165	0.465	8.0

10	Scrapers	313	0.660	8.0
19	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Jul '13
ase 3 Duration: 34 months
Start Month/Year for SubPhase Building: Jul '13
SubPhase Building Duration: 34 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
29	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jan '16
SubPhase Architectural Coatings Duration: 3.4 months
Start Month/Year for SubPhase Asphalt: Mar '16
SubPhase Asphalt Duration: 1.7 months
Acres to be Paved: 58.2
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Pavers	132	0.590	8.0
10	Rollers	114	0.430	8.0

anges made to the default values for Land Use Trip Percentages

e Trip Rate and/or Acreage values for Single family housing
ave changed from the defaults 9.57/21.33 to 9.57/59
e Trip Rate and/or Acreage values for Apartments low rise
ave changed from the defaults 6.9/102.12 to 6.72/161.40
e Trip Rate and/or Acreage values for Apartments mid rise
ave changed from the defaults 5.76/11.38 to 5.86/18.80

anges made to the default values for Construction

te Grading Miles/Round Trip changed from 20 to 3
chitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
chitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\1C\MariposaPhase1CConstruct
oject Name: Mariposa Phase 1 C Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

nstruction Start Month and Year: January, 2013
nstruction Duration: 40
tal Land Use Area to be Developed: 383.7 acres
ximum Acreage Disturbed Per Day: 95.93 acres
ngle Family Units: 64 Multi-Family Units: 2066.28
tail/Office/Institutional/Industrial Square Footage: 1128980

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2013***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.92	-	0.92
f-Road Diesel	0.29	1.65	2.42	-	0.05	0.05	0.00
-Road Diesel	0.12	2.29	0.46	0.01	0.06	0.05	0.01
rker Trips	0.00	0.01	0.06	0.00	0.00	0.00	0.00
Total tons/year	0.41	3.95	2.94	0.01	1.03	0.10	0.93
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	42.21	-	42.21
f-Road Diesel	11.58	70.03	97.46	-	2.28	2.28	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.03	0.02	0.40	0.00	0.01	0.00	0.01
Total tons/year	11.61	70.05	97.86	0.00	44.50	2.28	42.22
ase 3 - Building Construction							
dg Const Off-Road Diesel	3.94	25.67	32.41	-	1.03	1.03	0.00
dg Const Worker Trips	0.36	0.20	4.58	0.00	0.09	0.01	0.08
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	4.30	25.87	36.99	0.00	1.12	1.04	0.08
Total all phases tons/yr	16.32	99.87	137.79	0.01	46.65	3.42	43.23
** 2014***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	7.89	51.34	64.82	-	2.05	2.05	0.00
dg Const Worker Trips	0.71	0.40	9.16	0.00	0.17	0.01	0.16
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	8.60	51.74	73.98	0.00	2.22	2.06	0.16
Total all phases tons/yr	8.60	51.74	73.98	0.00	2.22	2.06	0.16

** 2015***

ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	7.89	51.34	64.82	-	2.05	2.05	0.00
dg Const Worker Trips	0.46	0.29	6.59	0.00	0.17	0.01	0.16
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	8.35	51.63	71.41	0.00	2.22	2.06	0.16
Total all phases tons/yr	8.35	51.63	71.41	0.00	2.22	2.06	0.16

** 2016***

ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 3 - Building Construction							
dg Const Off-Road Diesel	2.63	17.11	21.61	-	0.68	0.68	0.00
dg Const Worker Trips	0.15	0.09	2.10	0.00	0.06	0.00	0.05
ch Coatings Off-Gas	28.31	-	-	-	-	-	-
ch Coatings Worker Trips	0.13	0.08	1.77	0.00	0.05	0.00	0.05
phalt Off-Gas	0.08	-	-	-	-	-	-
phalt Off-Road Diesel	0.40	2.33	3.41	-	0.06	0.06	0.00
phalt On-Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Total tons/year	31.71	19.71	28.94	0.00	0.84	0.74	0.10
Total all phases tons/yr	31.71	19.71	28.94	0.00	0.84	0.74	0.10

ase 1 - Demolition Assumptions
art Month/Year for Phase 1: Jan '13
ase 1 Duration: 2 months
ilding Volume Total (cubic feet): 138450
ilding Volume Daily (cubic feet): 99225
-Road Truck Travel (VMT): 5514
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Rubber Tired Loaders	165	0.465	8.0

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Mar '13
ase 2 Duration: 4 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
48	Crawler Tractors	143	0.575	8.0
10	Graders	174	0.575	8.0
29	Off Highway Trucks	417	0.490	8.0
19	Rubber Tired Loaders	165	0.465	8.0

10	Scrapers	313	0.660	8.0
19	Tractor/Loaders/Backhoes	79	0.465	8.0

ase 3 - Building Construction Assumptions
art Month/Year for Phase 3: Jul '13
ase 3 Duration: 34 months
Start Month/Year for SubPhase Building: Jul '13
SubPhase Building Duration: 34 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
29	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: Jan '16
SubPhase Architectural Coatings Duration: 3.4 months
Start Month/Year for SubPhase Asphalt: Mar '16
SubPhase Asphalt Duration: 1.7 months
Acres to be Paved: 58.2
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
10	Pavers	132	0.590	8.0
10	Rollers	114	0.430	8.0

nges made to the default values for Land Use Trip Percentages

Trip Rate and/or Acreage values for Single family housing
ve changed from the defaults 9.57/21.33 to 9.57/59
Trip Rate and/or Acreage values for Apartments low rise
ve changed from the defaults 6.9/102.12 to 6.72/161.40
Trip Rate and/or Acreage values for Apartments mid rise
ve changed from the defaults 5.76/11.38 to 5.86/18.80

nges made to the default values for Construction

e Grading Miles/Round Trip changed from 20 to 3
hitectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00602
hitectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0116

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\Off-Site\MariposaOffSiteArk
oject Name: Mariposa Phase Off-Site Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

NSTRUCTION EMISSION ESTIMATES

** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	7.25	44.54	62.05	0.00	89.12	1.73	87.39
OTALS (tpy, mitigated)	7.25	44.54	62.05	0.00	89.12	1.73	87.39

** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	3.62	21.95	31.03	0.00	44.49	0.79	43.70
OTALS (tpy, mitigated)	3.62	21.95	31.03	0.00	44.49	0.79	43.70

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\Off-Site\MariposaOffSiteArb
oject Name: Mariposa Phase Off-Site Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

nstruction Start Month and Year: January, 2008
nstruction Duration: 12
tal Land Use Area to be Developed: 277.5 acres
ximum Acreage Disturbed Per Day: 69.38 acres
ngle Family Units: 0 Multi-Family Units: 0
tail/Office/Institutional/Industrial Square Footage: 0

NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2008***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	130.60	-	130.60
f-Road Diesel	7.21	44.47	61.26	-	1.73	1.73	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.04	0.07	0.79	0.00	0.00	0.00	0.00
Total tons/year	7.25	44.54	62.05	0.00	132.33	1.73	130.60
ase 3 - Building Construction							
dg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
dg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	7.25	44.54	62.05	0.00	132.33	1.73	130.60

ase 3 - Building Construction Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
art Month/Year for Phase 2: Jan '08
ase 2 Duration: 12 months
-Road Truck Travel (VMT): 0
f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
15	Scrapers	313	0.660	8.0

anges made to the default values for Land Use Trip Percentages

anges made to the default values for Construction

ce Grading Fugitive Dust Option changed from Level 1 to Level 2
ce Grading Miles/Round Trip changed from 20 to 3

URBEMIS 2002 For Windows 8.7.0

le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\Off-Site\MariposaOffSiteArb
oject Name: Mariposa Phase Off-Site Construction
oject Location: San Joaquin Valley
-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

NSTRUCTION EMISSION ESTIMATES

** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
OTALS (tpy, unmitigated)	7.25	44.54	62.05	0.00	132.33	1.73	130.60
OTALS (tpy, mitigated)	7.25	44.54	62.05	0.00	132.33	1.73	130.60

URBEMIS 2002 For Windows 8.7.0

.le Name: C:\Documents and Settings\sacramento\Desktop\mariposa\AQ Modeling\Off-Site\MariposaOffSiteArt
'oject Name: Mariposa Phase Off-Site Construction
'oject Location: San Joaquin Valley
ı-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

›nstruction Start Month and Year: January, 2008
›nstruction Duration: 18
›tal Land Use Area to be Developed: 277.5 acres
ıximum Acreage Disturbed Per Day: 69.38 acres
.ngle Family Units: 0 Multi-Family Units: 0
›tail/Office/Institutional/Industrial Square Footage: 0

›NSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
** 2008***							
ıase 1 - Demolition Emissions							
ıgitive Dust	-	-	-	-	0.00	-	0.00
:f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
ı-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
›rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ıase 2 - Site Grading Emissions							
.gitive Dust	-	-	-	-	87.39	-	87.39
:f-Road Diesel	7.21	44.47	61.26	-	1.73	1.73	0.00
.-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
›rker Trips	0.04	0.07	0.79	0.00	0.00	0.00	0.00
Total tons/year	7.25	44.54	62.05	0.00	89.12	1.73	87.39
.ase 3 - Building Construction							
dg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
dg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
'ch Coatings Off-Gas	0.00	-	-	-	-	-	-
'ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	7.25	44.54	62.05	0.00	89.12	1.73	87.39
** 2009***							
ase 1 - Demolition Emissions							
gitive Dust	-	-	-	-	0.00	-	0.00
f-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ase 2 - Site Grading Emissions							
gitive Dust	-	-	-	-	43.70	-	43.70
f-Road Diesel	3.60	21.91	30.63	-	0.79	0.79	0.00
-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
rker Trips	0.02	0.04	0.40	0.00	0.00	0.00	0.00
Total tons/year	3.62	21.95	31.03	0.00	44.49	0.79	43.70
ase 3 - Building Construction							
dg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
dg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ch Coatings Off-Gas	0.00	-	-	-	-	-	-
ch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Off-Gas	0.00	-	-	-	-	-	-
phalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
phalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	3.62	21.95	31.03	0.00	44.49	0.79	43.70

ıase 3 - Building Construction Assumptions: Phase Turned OFF

ıase 2 - Site Grading Assumptions
:art Month/Year for Phase 2: Jan '08
ıase 2 Duration: 18 months
ı-Road Truck Travel (VMT): 0
:f-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
15	Scrapers	313	0.660	8.0

anges made to the default values for Land Use Trip Percentages

anges made to the default values for Construction

te Grading Fugitive Dust Option changed from Level 1 to Level 2
te Grading Miles/Round Trip changed from 20 to 3

Mid-2007 to 2008			
Phase 1A-A Initial Site Preparation (Demolition and Grading) Activities[1]			
Demolition (1.5 months)			
Fugitive Dust	-	-	0.69
Off-Road Diesel	0.11	0.64	0.02
On-Road Diesel	0.12	1.96	0.06
Worker Commute	-	-	-
Site Grading (3 months)			
Fugitive Dust	-	-	15.87
Off-Road Diesel	4.36	28.72	1.15
On-Road Diesel	-	-	-
Worker Commute	0.02	0.01	-
Phase 1A-A Building Activities (1.5 months)[2]			
Building Construction			
Off-Road Diesel	0.49	3.77	0.17
Worker Commute	0.06	0.03	0.01
Total, Unmitigated (2007)	5.16	**35.13**	**17.97**
Mitigation NA	0.08	**0.04**	**0.01**
Mitigation A	5.08	35.09	1.4
	5.16	35.13	17.97
Total, Mitigated (2007)	**4.906**	**28.112**	**4.92**
SJVAPCD Significance Threshold	**10**	**10**	**-**
2008 to 2009			
Phase 1A-A Building Activities (12 months)[2]			
Building Construction			
Off-Road Diesel	3.95	28.69	1.22
Worker Commute	0.39	0.21	0.08
Total, Unmitigated (2008)	4.34	**28.9**	**1.3**
Mitigation NA	0.39	0.21	0.08
Mitigation A	3.95	28.69	1.22
	4.34	28.9	1.3
Total, Mitigated (2007)	**4.1425**	**23.162**	**0.751**
SJVAPCD Significance Threshold	**10**	**10**	**-**
2009 to 2010			
Phase 1A-A Building Activities[2]			
Building Construction (8.1 months)			
Off-Road Diesel	3.95	27.18	1.15
Worker Commute	0.37	0.23	0.08
Architectural Coatings (2.6 months)			
Off-Gassing	12.26	-	-
Worker Commute	0.08	0.05	0.02
Asphalt (1.3 months)			
Off-Gassing	0.04	-	-
Off-Road Diesel	0.15	0.89	0.02
On-Road Diesel	0.01	0.14	-
Worker Commute	-	-	-
Total, Unmitigated (2009)	**16.86**	**28.49**	**1.27**
Mitigation NA	12.75	0.28	0.1
Mitigation A	4.11	28.21	1.17
	16.86	28.49	1.27
Total, Mitigated (2007)	**16.6545**	**22.848**	**0.7435**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2010
Phase 1A-B Initial Site Preparation (Grading) Activities (2.2 months)[1]			
Site Grading			
Fugitive Dust	-	-	9.33
Off-Road Diesel	2.56	15.49	0.5
On-Road Diesel	-	-	-
Worker Commute	0.02	0.04	-
Phase 1A-B Building Activities (9.8 months)[2]			
Building Construction			
Off-Road Diesel	2.59	16.85	0.67
Worker Commute	0.2	0.11	0.05
Total, Unmitigated (2010)	5.37	**32.49**	**10.55**
Mitigation NA	0.22	0.15	0.05
Mitigation A	5.15	32.34	1.17
	5.37	32.49	10.55

Total, Mitigated (2007)	**5.1125**	**26.022**	**3.026**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2011
Phase 1A-B Building Activities (5.3 months)[2]			
Building Construction			
Off-Road Diesel	2.11	13.76	0.55
Worker Commute	0.17	0.09	0.04
Architectural Coatings (1.8 months)			
Off-Gassing	8.75	-	-
Worker Commute	0.04	0.02	0.01
Asphalt (0.9 months)			
Off-Gassing	0.03	-	-
Off-Road Diesel	0.09	0.5	0.01
On-Road Diesel	-	0.08	-
Worker Commute	-	-	-
Phase 1B Initial Site Preparation (Grading) Activities[1]			
Site Grading (1.8 months)			
Fugitive Dust	-	-	12.27
Off-Road Diesel	3.37	20.36	0.66
On-Road Diesel	-	-	-
Worker Commute	0.02	0.03	-
Phase 1B Building Activities (2.2 months)[2]			
Building Construction			
Off-Road Diesel	0.93	6.08	0.24
Worker Commute	0.05	0.03	0.01
Total, Unmitigated (2011)	**15.56**	**40.95**	**13.79**
Mitigation NA	9.06	0.17	0.06
Mitigation A	6.5	40.78	1.46
	15.56	40.95	13.79
Total, Mitigated (2007)	**15.235**	**32.794**	**3.9305**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2012
Phase 1B Building Activities (12 months)[2]			
Building Construction (9.9 months)			
Off-Road Diesel	5.09	33.16	1.32
Worker Commute	0.26	0.15	0.06
Architectural Coatings (1.4 months)			
Off-Gassing	9.1	-	-
Worker Commute	0.03	0.02	0.01
Asphalt (0.7 months)			
Off-Gassing	0.05	-	-
Off-Road Diesel	0.11	0.62	0.02
On-Road Diesel	0.01	0.14	-
Worker Commute	-	-	-
Total, Unmitigated (2012)	**14.65**	**34.09**	**1.41**
Mitigation NA	9.44	0.17	0.07
Mitigation A	5.21	33.92	1.34
	14.65	34.09	1.41
Total, Mitigated (2007)	**14.3895**	**27.306**	**0.807**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2013
Phase 1C Initial Site Preparation (Demolition and Grading) Activities[1]			
Demolition (2 months)			
Fugitive Dust	-	-	0.92
Off-Road Diesel	0.29	1.65	0.05
On-Road Diesel	0.12	2.29	0.06
Worker Commute	-	-	-
Site Grading (4 months)			
Fugitive Dust	-	-	42.21
Off-Road Diesel	11.58	70.03	2.28
On-Road Diesel	-	-	-
Worker Commute	0.03	0.02	0.01
Phase 1C Building Activities (6 months)[2]			
Building Construction			
Off-Road Diesel	3.94	25.67	1.03
Worker Commute	0.36	0.2	0.09
Total, Unmitigated (2013)	**16.32**	**99.86**	**46.65**

Mitigation NA	0.39	0.22	0.1
Mitigation A	15.93	99.64	3.42
	16.32	99.86	46.65
Total, Mitigated (2007)	**15.5235**	**79.932**	**12.7635**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2014
Phase 1C Building Activities (12 months)[2]			
Building Construction			
Off-Road Diesel	7.89	51.34	2.05
Worker Commute	0.71	0.4	0.17
Total, Unmitigated (2014)	8.6	**51.74**	**2.22**
Mitigation NA	0.71	0.4	0.17
Mitigation A	7.89	51.34	2.05
	8.6	51.74	2.22
Total, Mitigated (2007)	**8.2055**	**41.472**	**1.2975**
SJVAPCD Significance Threshold	**10**	**10**	**-**
			2015
Phase 1C Building Activities (12 months)[2]			
Building Construction			
Off-Road Diesel	7.89	51.34	2.05
Worker Commute	0.46	0.29	0.17
Total, Unmitigated (2015)	8.35	**51.63**	**2.22**
Mitigation NA	0.46	0.29	0.17
Mitigation A	7.89	51.34	2.05
	8.35	51.63	2.22
Total, Mitigated (2007)	**7.9555**	**41.362**	**1.2975**
SJVAPCD Significance Threshold	**10**	**10**	**-**
Early 2016			
Phase 1C Building Activities (4 months)[2]			
Building Construction			
Off-Road Diesel	2.63	17.11	0.68
Worker Commute	0.15	0.09	0.06
Architectural Coatings			
Off-Gassing	28.31	-	-
Worker Commute	0.13	0.08	0.05
Asphalt			
Off-Gassing	0.08	-	-
Off-Road Diesel	0.4	2.33	0.06
On-Road Diesel	0.01	0.1	-
Worker Commute	-	-	-
Total, Unmitigated (2016)	**31.71**	**19.71**	**0.85**
Mitigation NA	28.67	0.17	0.11
Mitigation A	3.04	19.54	0.74
	31.71	19.71	0.85
Total, Mitigated (2007)	**31.558**	**15.802**	**0.517**
SJVAPCD Significance Threshold	**10**	**10**	**-**
After Completion of Phase (Worst-Case Emissions for Future Phases 2-5)			
Initial Site Preparation (Demolition and Grading) Activities[1]			
Initial Site Preparation Activities	2.4	14.8	5.5
Building Activities	12.1	10.9	0.5
Total, Unmitigated (After Completion of Phase 1)	**4**	**25.7**	**15.6**
Total, Mitigated (After Completion of Phase 1)	**-**	**-**	**-**
SJVAPCD Significance Threshold	**10**	**10**	**-**