



APPENDIX C
AIR QUALITY
BACKGROUND INFORMATION

Air Emissions Screening Analysis

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\Nipomo AQ Screening\NCP Emissions Screening.urb924

Project Name: Nipomo Community Park Construction Emissions Screening

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2007 TOTALS (tons/year unmitigated)	0.06	0.46	0.26	0.00	1.32	0.03	1.35	0.28	0.02	0.30	36.40
2008 TOTALS (tons/year unmitigated)	0.38	1.75	1.37	0.00	0.54	0.12	0.66	0.11	0.11	0.23	169.07

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.02	0.00	0.25	0.00	0.00	0.00	0.46

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3.03	4.29	34.66	0.03	5.19	0.99	2,672.09

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3.05	4.29	34.91	0.03	5.19	0.99	2,672.55

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.02	0.00	0.25	0.00	0.00	0.00	0.46
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.02	0.00	0.25	0.00	0.00	0.00	0.46

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
City park	3.03	4.29	34.66	0.03	5.19	0.99	2,672.09
TOTALS (tons/year, unmitigated)	3.03	4.29	34.66	0.03	5.19	0.99	2,672.09

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses						
Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		3,058.00	acres	1.00	3,058.00	16,513.20
					3,058.00	16,513.20
Vehicle Fleet Mix						
Vehicle Type	Percent Type		Non-Catalyst		Catalyst	Diesel
Light Auto	41.6		0.7		99.1	0.2
Light Truck < 3750 lbs	18.8		1.6		92.0	6.4
Light Truck 3751-5750 lbs	19.9		0.5		99.0	0.5
Med Truck 5751-8500 lbs	8.0		0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1		0.0		71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2		0.0		50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0		0.0		20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3		0.0		0.0	100.0
Other Bus	0.1		0.0		0.0	100.0
Urban Bus	0.0		0.0		0.0	0.0
Motorcycle	5.2		53.8		46.2	0.0
School Bus	0.1		0.0		0.0	100.0
Motor Home	1.7		0.0		88.2	11.8
Travel Conditions						
	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\Nipomo AQ Screening\NCP Emissions Screening.urb924

Project Name: Nipomo Community Park Construction Emissions Screening

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2007 TOTALS (lbs/day unmitigated)	9.74	61.80	35.74	0.01	120.04	3.76	123.79	25.07	3.46	28.53	4,942.74
2008 TOTALS (lbs/day unmitigated)	13.48	76.96	49.52	0.01	120.05	4.92	124.96	25.08	4.52	29.60	6,766.52

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	15.46	21.47	180.22	0.14	28.42	5.45	14,903.09

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	15.58	21.49	181.77	0.14	28.43	5.46	14,905.90

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	15.46	21.47	180.22	0.14	28.42	5.45	14,903.09
TOTALS (lbs/day, unmitigated)	15.46	21.47	180.22	0.14	28.42	5.45	14,903.09

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses						
Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		3,058.00	acres	1.00	3,058.00	16,513.20
					3,058.00	16,513.20
Vehicle Fleet Mix						
Vehicle Type	Percent Type		Non-Catalyst		Catalyst	Diesel
Light Auto	41.6		0.7		99.1	0.2
Light Truck < 3750 lbs	18.8		1.6		92.0	6.4
Light Truck 3751-5750 lbs	19.9		0.5		99.0	0.5
Med Truck 5751-8500 lbs	8.0		0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1		0.0		71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2		0.0		50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0		0.0		20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3		0.0		0.0	100.0
Other Bus	0.1		0.0		0.0	100.0
Urban Bus	0.0		0.0		0.0	0.0
Motorcycle	5.2		53.8		46.2	0.0
School Bus	0.1		0.0		0.0	100.0
Motor Home	1.7		0.0		88.2	11.8
Travel Conditions						
	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\Nipomo AQ Screening\NCP Emissions Screening.urb924

Project Name: Nipomo Community Park Construction Emissions Screening

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2007 TOTALS (lbs/day unmitigated)	9.74	61.80	35.74	0.01	120.04	3.76	123.79	25.07	3.46	28.53	4,942.74
2008 TOTALS (lbs/day unmitigated)	13.48	76.96	49.52	0.01	120.05	4.92	124.96	25.08	4.52	29.60	6,766.52

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18.94	27.61	209.30	0.14	28.42	5.45	14,118.66

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	18.94	27.61	209.30	0.14	28.42	5.45	14,118.66

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (lbs/day, unmitigated)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	18.94	27.61	209.30	0.14	28.42	5.45	14,118.66
TOTALS (lbs/day, unmitigated)	18.94	27.61	209.30	0.14	28.42	5.45	14,118.66

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses						
Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		3,058.00	acres	1.00	3,058.00	16,513.20
					3,058.00	16,513.20
Vehicle Fleet Mix						
Vehicle Type	Percent Type		Non-Catalyst		Catalyst	Diesel
Light Auto	41.6		0.7		99.1	0.2
Light Truck < 3750 lbs	18.8		1.6		92.0	6.4
Light Truck 3751-5750 lbs	19.9		0.5		99.0	0.5
Med Truck 5751-8500 lbs	8.0		0.0		100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1		0.0		71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2		0.0		50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0		0.0		20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3		0.0		0.0	100.0
Other Bus	0.1		0.0		0.0	100.0
Urban Bus	0.0		0.0		0.0	0.0
Motorcycle	5.2		53.8		46.2	0.0
School Bus	0.1		0.0		0.0	100.0
Motor Home	1.7		0.0		88.2	11.8
Travel Conditions						
	Residential			Commute	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

Master Plan Operational and Area Source Emissions

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\06-14-11 Nipomo Park Urbemis Operational & Area Calcs\6-15-11 NCP.urb924

Project Name: Nipomo Park EIR Updated AQ Calculations

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.53						
TOTALS (tons/year, mitigated)	0.53						
Percent Reduction	0.00	NaN	NaN	NaN	NaN	NaN	NaN

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	2.78	3.39	28.09	0.00	3.48	0.66	1,816.95

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	3.31	3.39	28.09	0.00	3.48	0.66	1,816.95

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas							
Hearth							
Landscape							
Consumer Products							
Architectural Coatings	0.53						
TOTALS (tons/year, unmitigated)	0.53						

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas							
Hearth							
Landscape							
Consumer Products							
Architectural Coatings	0.53						
TOTALS (tons/year, mitigated)	0.53						

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	0.01	0.02	0.15	0.00	0.02	0.00	10.47
Day-care center	0.02	0.01	0.12	0.00	0.01	0.00	6.66
Library	0.55	0.62	5.19	0.00	0.60	0.12	315.62
City park	0.02	0.01	0.10	0.00	0.01	0.00	6.68
Racquet club	0.76	0.85	7.14	0.00	0.84	0.16	441.52
Racquetball/health	0.15	0.16	1.37	0.00	0.16	0.03	84.48
Baseball/softball fields	0.13	0.17	1.37	0.00	0.18	0.03	92.99
Basketball courts	0.41	0.56	4.57	0.00	0.60	0.12	309.97
Handball courts	0.08	0.11	0.91	0.00	0.12	0.02	61.99
Tennis courts	0.21	0.28	2.28	0.00	0.30	0.06	154.92
Sports fields (soccer)	0.44	0.60	4.89	0.00	0.64	0.12	331.65
TOTALS (tons/year, unmitigated)	2.78	3.39	28.09	0.00	3.48	0.66	1,816.95

Operational Settings:

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2012 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

<u>Summary of Land Uses</u>						
Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	0.33	9.57	dwelling units	1.00	9.57	63.94
Day-care center		4.48	1000 sq ft	4.05	18.14	39.34
Library		56.24	1000 sq ft	11.13	625.95	1,904.71
City park		1.59	acres	6.24	9.92	40.88
Racquet club		22.88	1000 sq ft	36.00	823.68	2,673.17
Racquetball/health		15.76	1000 sq ft	10.00	157.60	511.48
Baseball/softball fields		30.00	acres	4.00	120.00	572.76
Basketball courts		200.00	acres	2.00	400.00	1,909.20
Handball courts		40.00	acres	2.00	80.00	381.84
Tennis courts		33.32	acres	6.00	199.92	954.22
Sports fields (soccer)		71.33	acres	6.00	427.98	2,042.75
					2,872.76	11,094.29

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	1.0	98.5	0.5
Light Truck < 3750 lbs	18.8	2.1	91.5	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	1.2	98.8	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0

Vehicle Fleet Mix				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	57.7	42.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Library				5.0	2.5	92.5
City park				5.0	2.5	92.5
Racquet club				5.0	2.5	92.5
Racquetball/health				5.0	2.5	92.5
Baseball/softball fields				2.0	1.0	97.0

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Basketball courts				2.0	1.0	97.0
Handball courts				2.0	1.0	97.0
Tennis courts				2.0	1.0	97.0
Sports fields (soccer)				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\06-14-11 Nipomo Park Urbemis Operational & Area Calcs\6-15-11 NCP.urb924

Project Name: Nipomo Park EIR Updated AQ Calculations

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	2.92						
TOTALS (lbs/day, mitigated)	2.92						
Percent Reduction	0.00	NaN	NaN	NaN	NaN	NaN	NaN

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	17.13	21.80	173.25	0.09	19.12	3.69	9,608.05

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	20.05	21.80	173.25	0.09	19.12	3.69	9,608.05

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas							
Hearth							
Landscape							
Consumer Products							
Architectural Coatings	2.92						
TOTALS (lbs/day, unmitigated)	2.92						

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas							
Hearth							
Landscape							
Consumer Products							
Architectural Coatings	2.92						
TOTALS (lbs/day, mitigated)	2.92						

[Area Source Changes to Defaults](#)

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	0.08	0.12	0.91	0.00	0.11	0.02	55.39
Day-care center	0.09	0.09	0.77	0.00	0.07	0.01	35.24
Library	3.45	3.95	32.42	0.02	3.28	0.64	1,669.71
City park	0.07	0.08	0.63	0.00	0.07	0.01	35.33
Racquet club	4.65	5.46	44.42	0.02	4.61	0.89	2,335.45
Racquetball/health	0.89	1.04	8.50	0.00	0.88	0.17	446.86
Baseball/softball fields	0.77	1.08	8.37	0.00	0.99	0.19	491.58
Basketball courts	2.57	3.60	27.88	0.02	3.29	0.63	1,638.59
Handball courts	0.52	0.72	5.58	0.00	0.66	0.13	327.72
Tennis courts	1.29	1.80	13.94	0.01	1.64	0.32	818.97
Sports fields (soccer)	2.75	3.86	29.83	0.02	3.52	0.68	1,753.21
TOTALS (lbs/day, unmitigated)	17.13	21.80	173.25	0.09	19.12	3.69	9,608.05

Operational Settings:

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2012 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	0.33	9.57	dwelling units	1.00	9.57	63.94
Day-care center		4.48	1000 sq ft	4.05	18.14	39.34
Library		56.24	1000 sq ft	11.13	625.95	1,904.71
City park		1.59	acres	6.24	9.92	40.88
Racquet club		22.88	1000 sq ft	36.00	823.68	2,673.17
Racquetball/health		15.76	1000 sq ft	10.00	157.60	511.48
Baseball/softball fields		30.00	acres	4.00	120.00	572.76
Basketball courts		200.00	acres	2.00	400.00	1,909.20
Handball courts		40.00	acres	2.00	80.00	381.84
Tennis courts		33.32	acres	6.00	199.92	954.22
Sports fields (soccer)		71.33	acres	6.00	427.98	2,042.75
					2,872.76	11,094.29

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	1.0	98.5	0.5
Light Truck < 3750 lbs	18.8	2.1	91.5	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	1.2	98.8	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0

Vehicle Fleet Mix				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	57.7	42.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)						
Day-care center				5.0	2.5	92.5
Library				5.0	2.5	92.5
City park				5.0	2.5	92.5
Racquet club				5.0	2.5	92.5
Racquetball/health				5.0	2.5	92.5
Baseball/softball fields				2.0	1.0	97.0

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Basketball courts				2.0	1.0	97.0
Handball courts				2.0	1.0	97.0
Tennis courts				2.0	1.0	97.0
Sports fields (soccer)				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: P:\15000\15542 Nipomo Community Park Master Plan Program EIR\Reports\A Working EIR\Air Quality\06-14-11 Nipomo Park Urbemis Operational & Area Calcs\6-15-11 NCP.urb924

Project Name: Nipomo Park EIR Updated AQ Calculations

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	2.92						
TOTALS (lbs/day, mitigated)	2.92						
Percent Reduction	0.00	NaN	NaN	NaN	NaN	NaN	NaN

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	14.26	16.99	144.25	0.09	19.12	3.69	10,129.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	17.18	16.99	144.25	0.09	19.12	3.69	10,129.97

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Alternative Master Plan A Air Emissions Screening Analysis

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\sscott\Desktop\NCP Alternatives Master Plan A.urb924

Project Name: NCP Alternative Master Plan A Screening Analysis

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.02	0.00	0.25	0.00	0.00	0.00	0.46
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.02	0.00	0.25	0.00	0.00	0.00	0.46

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.65	0.92	7.41	0.01	1.11	0.21	571.47
TOTALS (tons/year, unmitigated)	0.65	0.92	7.41	0.01	1.11	0.21	571.47

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		654.00	acres	1.00	654.00	3,531.60
					654.00	3,531.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0

Vehicle Fleet Mix				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

Travel Conditions						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\sscott\Desktop\NCP Alternatives Master Plan A.urb924

Project Name: NCP Alternative Master Plan A Screening Analysis

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (lbs/day, unmitigated)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	4.05	5.90	44.76	0.03	6.08	1.17	3,019.49
TOTALS (lbs/day, unmitigated)	4.05	5.90	44.76	0.03	6.08	1.17	3,019.49

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		654.00	acres	1.00	654.00	3,531.60
					654.00	3,531.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	41.6	0.7	99.1	0.2
Light Truck < 3750 lbs	18.8	1.6	92.0	6.4
Light Truck 3751-5750 lbs	19.9	0.5	99.0	0.5
Med Truck 5751-8500 lbs	8.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	71.4	28.6
Lite-Heavy Truck 10,001-14,000 lbs	1.2	0.0	50.0	50.0

<u>Vehicle Fleet Mix</u>				
Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	5.2	53.8	46.2	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.7	0.0	88.2	11.8

<u>Travel Conditions</u>						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Rural Trip Length (miles)	13.0	5.0	5.0	13.0	5.0	5.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\sscott\Desktop\NCP Alternatives Master Plan A.urb924

Project Name: NCP Alternative Master Plan A Screening Analysis

Project Location: San Luis Obispo County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2007 TOTALS (lbs/day unmitigated)	9.98	62.41	35.93	0.01	137.64	3.78	141.42	28.75	3.48	32.23	5,007.70
2008 TOTALS (lbs/day unmitigated)	13.72	77.53	49.69	0.01	137.65	4.94	142.59	28.75	4.54	33.29	6,831.48

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.12	0.02	1.55	0.00	0.01	0.01	2.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	3.31	4.59	38.54	0.03	6.08	1.17	3,187.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	3.43	4.61	40.09	0.03	6.09	1.18	3,190.06