

Los Flores Shooting Facility
Santa Barbara-North of Santa Ynez County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.18000E-003	1.51500E-002	1.64800E-002	3.00000E-005	1.00000E-003	1.00000E-003	0.00000E+000	2.29793E+000	2.29793E+000	1.80000E-004	0.00000E+000	2.30238E+000
Concrete/Industrial Saws	4.62000E-003	3.58900E-002	3.70200E-002	6.00000E-005	2.29000E-003	2.29000E-003	0.00000E+000	5.37657E+000	5.37657E+000	3.80000E-004	0.00000E+000	5.38603E+000
Cranes	5.06700E-002	6.03910E-001	2.30580E-001	5.80000E-004	2.55900E-002	2.35500E-002	0.00000E+000	5.21334E+001	5.21334E+001	1.65000E-002	0.00000E+000	5.25458E+001
Excavators	8.86000E-003	9.11800E-002	1.10950E-001	1.80000E-004	4.40000E-003	4.05000E-003	0.00000E+000	1.57653E+001	1.57653E+001	4.99000E-003	0.00000E+000	1.58900E+001
Forklifts	5.51300E-002	4.92370E-001	4.11950E-001	5.30000E-004	3.81300E-002	3.50800E-002	0.00000E+000	4.73511E+001	4.73511E+001	1.49800E-002	0.00000E+000	4.77257E+001
Generator Sets	5.10200E-002	4.34160E-001	4.28140E-001	7.60000E-004	2.59400E-002	2.59400E-002	0.00000E+000	6.49989E+001	6.49989E+001	4.11000E-003	0.00000E+000	6.51017E+001
Graders	1.95000E-003	2.63200E-002	7.35000E-003	3.00000E-005	8.40000E-004	7.80000E-004	0.00000E+000	2.38636E+000	2.38636E+000	7.60000E-004	0.00000E+000	2.40523E+000
Pavers	4.73000E-003	5.05900E-002	5.21700E-002	8.00000E-005	2.46000E-003	2.26000E-003	0.00000E+000	7.43429E+000	7.43429E+000	2.40000E-003	0.00000E+000	7.49440E+000
Paving Equipment	3.73000E-003	3.85400E-002	4.56200E-002	7.00000E-005	1.93000E-003	1.77000E-003	0.00000E+000	6.44238E+000	6.44238E+000	2.08000E-003	0.00000E+000	6.49447E+000
Rollers	3.75000E-003	3.74600E-002	3.40800E-002	5.00000E-005	2.39000E-003	2.20000E-003	0.00000E+000	4.14873E+000	4.14873E+000	1.34000E-003	0.00000E+000	4.18228E+000
Rubber Tired Dozers	3.57400E-002	3.80340E-001	1.34950E-001	2.70000E-004	1.85500E-002	1.70600E-002	0.00000E+000	2.41592E+001	2.41592E+001	7.64000E-003	0.00000E+000	2.43503E+001
Tractors/Loaders/Backhoes	7.53400E-002	7.56410E-001	7.45720E-001	1.01000E-003	5.04800E-002	4.64400E-002	0.00000E+000	9.03441E+001	9.03441E+001	2.85900E-002	0.00000E+000	9.10588E+001
Welders	4.42500E-002	1.86740E-001	2.07780E-001	2.90000E-004	1.14500E-002	1.14500E-002	0.00000E+000	2.16454E+001	2.16454E+001	3.61000E-003	0.00000E+000	2.17357E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.18000E-003	1.51500E-002	1.64800E-002	3.00000E-005	1.00000E-003	1.00000E-003	0.00000E+000	2.29793E+000	2.29793E+000	1.80000E-004	0.00000E+000	2.30237E+000
Concrete/Industrial Saws	4.62000E-003	3.58900E-002	3.70200E-002	6.00000E-005	2.29000E-003	2.29000E-003	0.00000E+000	5.37657E+000	5.37657E+000	3.80000E-004	0.00000E+000	5.38603E+000
Cranes	5.06700E-002	6.03910E-001	2.30580E-001	5.80000E-004	2.55900E-002	2.35500E-002	0.00000E+000	5.21333E+001	5.21333E+001	1.65000E-002	0.00000E+000	5.25457E+001
Excavators	8.86000E-003	9.11800E-002	1.10950E-001	1.80000E-004	4.40000E-003	4.05000E-003	0.00000E+000	1.57653E+001	1.57653E+001	4.99000E-003	0.00000E+000	1.58900E+001
Forklifts	5.51300E-002	4.92370E-001	4.11950E-001	5.30000E-004	3.81300E-002	3.50800E-002	0.00000E+000	4.73511E+001	4.73511E+001	1.49800E-002	0.00000E+000	4.77257E+001
Generator Sets	5.10200E-002	4.34160E-001	4.28140E-001	7.60000E-004	2.59400E-002	2.59400E-002	0.00000E+000	6.49988E+001	6.49988E+001	4.11000E-003	0.00000E+000	6.51016E+001
Graders	1.95000E-003	2.63200E-002	7.35000E-003	3.00000E-005	8.40000E-004	7.80000E-004	0.00000E+000	2.38635E+000	2.38635E+000	7.60000E-004	0.00000E+000	2.40523E+000
Pavers	4.73000E-003	5.05900E-002	5.21700E-002	8.00000E-005	2.46000E-003	2.26000E-003	0.00000E+000	7.43428E+000	7.43428E+000	2.40000E-003	0.00000E+000	7.49439E+000
Paving Equipment	3.73000E-003	3.85400E-002	4.56200E-002	7.00000E-005	1.93000E-003	1.77000E-003	0.00000E+000	6.44237E+000	6.44237E+000	2.08000E-003	0.00000E+000	6.49446E+000
Rollers	3.75000E-003	3.74600E-002	3.40800E-002	5.00000E-005	2.39000E-003	2.20000E-003	0.00000E+000	4.14873E+000	4.14873E+000	1.34000E-003	0.00000E+000	4.18227E+000
Rubber Tired Dozers	3.57400E-002	3.80340E-001	1.34950E-001	2.70000E-004	1.85500E-002	1.70600E-002	0.00000E+000	2.41592E+001	2.41592E+001	7.64000E-003	0.00000E+000	2.43503E+001
Tractors/Loaders/Balckhoes	7.53400E-002	7.56400E-001	7.45720E-001	1.01000E-003	5.04800E-002	4.64400E-002	0.00000E+000	9.03440E+001	9.03440E+001	2.85900E-002	0.00000E+000	9.10587E+001
Welders	4.42500E-002	1.86740E-001	2.07780E-001	2.90000E-004	1.14500E-002	1.14500E-002	0.00000E+000	2.16454E+001	2.16454E+001	3.61000E-003	0.00000E+000	2.17357E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.34333E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15089E-006	1.15089E-006	0.00000E+000	0.00000E+000	1.14186E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26861E-006	1.26861E-006	0.00000E+000	0.00000E+000	1.25865E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26713E-006	1.26713E-006	0.00000E+000	0.00000E+000	1.25718E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23079E-006	1.23079E-006	0.00000E+000	0.00000E+000	1.07524E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.19048E-006	4.19048E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.34512E-006	1.34512E-006	0.00000E+000	0.00000E+000	1.33433E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.55222E-006	1.55222E-006	0.00000E+000	0.00000E+000	1.53977E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.39104E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.27841E-007	8.27841E-007	0.00000E+000	0.00000E+000	1.23202E-006
Tractors/Loaders/Balckhoes	0.00000E+000	1.32203E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10688E-006	1.10688E-006	0.00000E+000	0.00000E+000	1.20801E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.23985E-007	9.23985E-007	0.00000E+000	0.00000E+000	1.38022E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.09	0.02	0.09	0.02	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.03	0.01	0.03	0.01	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.05	0.02	0.05	0.02	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
--	--