

The Village at Playa Vista

Appendix E-5

Concurrent Construction/Operation - Regional Emissions

E-5a - Construction Emissions

- Summary

E-5b - Off-Site Roadway Improvements URBEMIS2002 Output Files

- Centinela Corridor
- Intersection #11-Centinela Avenue and Culver Boulevard
- Intersection #14-Centinela Avenue and La Tijera Boulevard
- Intersection #77-Culver Boulevard and Inglewood Boulevard
- Intersection #99-Centinela Avenue and Washington Place
- Intersection #100-Overland Avenue and Culver Boulevard
- Intersection #102-Sawtelle Avenue and Culver Boulevard

E-5c - Operation Emissions

- Summary
- Electricity and Natural Gas Usage
- URBEMIS2002 Output Files
- Miscellaneous Sources Emissions Worksheets

E-5a

Construction Emissions

WORST-CASE YEAR						
Construction Emissions Summary Including Offsite Roadway Improvements						
Source	Emission Totals (lbs/day)					
	CO	NOx	PM10	ROC	SOx	
Centinela Corridor.	84.25	76.86	11.13	10.62		0.02
Intersection #11	67.96	59.63	2.96	8.59		0.02
Intersection #14	84.12	76.23	6.41	10.58		0.02
Intersection #77	73.54	65.86	4.05	9.23		0.02
Intersection #99	68.08	60.14	3.32	8.77		0.02
Intersection #100	67.93	59.52	2.97	8.56		0.02
Total Offsite	445.88	398.24	30.84	56.35		0.12
Onsite Construction	915.86	532.83	47.79	447.05		44.60
Total:	1361.74	931.07	78.63	503.40		44.72
AQMD Threshold	550	100	150	75		150
Difference	811.7	831.1	(71.4)	428.4		(105.3)
Significant?	YES	YES	NO	YES		NO
YEAR 2009						
Construction Emissions Summary Including Offsite Roadway Improvements						
Source	Emission Totals (lbs/day)					
	CO	NOx	PM10	ROC	SOx	
Centinela Corridor.	88.90	68.00	10.29	10.59		0.00
Intersection #11	70.90	53.75	2.33	8.58		0.00
Intersection #14	88.81	67.52	5.57	10.56		0.00
Intersection #77	77.33	58.57	3.32	9.20		0.00
Intersection #99	70.99	54.13	2.68	8.74		0.00
Intersection #100	70.88	53.67	2.34	8.54		0.00
Total Offsite	467.81	355.64	26.53	56.21		0.00
Onsite Construction	107.82	69.34	2.78	274.61		10.37
Total:	575.63	424.98	29.31	330.82		10.37
AQMD Threshold	550	100	150	75		150
Difference	25.6	325.0	(120.7)	255.8		(139.6)
Significant?	YES	YES	NO	YES		NO

Project Site Summary

Year	Emission Totals (lbs/day)				
	CO	NOx	PM10	ROC	SOx
2004	706.04	435.21	47.79	86.28	13.76
2005	670.90	412.61	46.83	81.98	13.76
2006	915.86	532.83	24.55	447.05	44.60
2007	230.52	178.52	6.98	301.35	16.54
2008	194.84	149.11	5.59	239.12	13.23
2009	107.82	69.34	2.78	274.61	10.37
2010	24.10	12.93	0.55	62.60	1.96
MAX	915.86	532.83	47.79	447.05	44.60
AQMD Threshold	550	100	150	75	150
Difference	365.9	432.8	(102.2)	372.1	(105.4)
Significant?	YES	YES	NO	YES	NO

E-5b

Off-Site Roadway Improvements URBEMIS2002 Output Files

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\CentCorr.urb
 Project Name: Playa Vista (Offsite Improvements--Centinela Avenue Corridor)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	10.59	68.00	88.91	0.00	89.30	2.58	86.72
TOTALS (lbs/day, mitigated)	10.59	68.00	88.91	0.00	10.29	2.58	7.71

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\CentCorr.urb
 Project Name: Playa Vista (Offsite Improvements--Centinela Avenue Corridor)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 2
 Total Land Use Area to be Developed: 2.27 acres
 Maximum Acreage Disturbed Per Day: 2.27 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.37	-	0.37
Off-Road Diesel	5.96	41.01	47.39	-	1.73	1.73	0.00
On-Road Diesel	0.05	0.85	0.18	0.00	0.03	0.02	0.01
Worker Trips	0.08	0.12	2.32	0.00	0.01	0.00	0.01
Maximum lbs/day	6.09	41.98	49.89	0.00	2.14	1.75	0.39
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	7.70	-	7.70
Off-Road Diesel	10.45	67.07	86.13	-	2.56	2.56	0.00
On-Road Diesel	0.05	0.80	0.17	0.00	0.02	0.02	0.00
Worker Trips	0.09	0.13	2.61	0.00	0.01	0.00	0.01
Maximum lbs/day	10.59	68.00	88.91	0.00	10.29	2.58	7.71
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.32	-	-	-	-	-	-
Asphalt Off-Road Diesel	5.22	31.67	43.82	-	1.01	1.01	0.00
Asphalt On-Road Diesel	0.06	0.86	0.21	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.02	0.01	0.29	0.00	0.01	0.00	0.01
Maximum lbs/day	9.93	61.78	78.75	0.00	2.25	2.24	0.01
Max lbs/day all phases	10.59	68.00	88.91	0.00	10.29	2.58	7.71

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 87025
 Building Volume Daily (cubic feet): 870.25
 On-Road Truck Travel (VMT): 48

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
4	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .5 months

On-Road Truck Travel (VMT): 46

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
1	Scrapers	313	0.660	8.3
4	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jul '09

Phase 3 Duration: 1 months

Start Month/Year for SubPhase Building: Jul '09

SubPhase Building Duration: 1 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jul '09

SubPhase Architectural Coatings Duration: .5 months

Start Month/Year for SubPhase Asphalt: Jul '09

SubPhase Asphalt Duration: .5 months

Acres to be Paved: 1.34

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Paving Equipment	111	0.530	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily

has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph

has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int11.urb
 Project Name: Playa Vista (Offsite Improvements--Int#11 Centinela Ave. & Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	8.58	53.75	70.90	0.00	6.58	1.91	4.67
TOTALS (lbs/day, mitigated)	8.58	53.75	70.90	0.00	2.33	1.91	0.42

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int11.urb
 Project Name: Playa Vista (Offsite Improvements--Int#11 Centinela Ave. & Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 1
 Total Land Use Area to be Developed: 0.122 acres
 Maximum Acreage Disturbed Per Day: 0.122 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	4.62	31.77	36.71	-	1.34	1.34	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	4.71	32.55	38.31	0.00	1.68	1.36	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.41	-	0.41
Off-Road Diesel	5.33	34.87	43.35	-	1.34	1.34	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	5.38	34.94	44.80	0.00	1.76	1.34	0.42
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.07	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.01	0.18	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.04	0.06	1.16	0.00	0.00	0.00	0.00
Maximum lbs/day	8.58	53.75	70.90	0.00	1.91	1.91	0.00
Max lbs/day all phases	8.58	53.75	70.90	0.00	2.33	1.91	0.42

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
 Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .25 months
 Building Volume Total (cubic feet): 3294.76
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .25 months

On-Road Truck Travel (VMT): 0

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '09

Phase 3 Duration: .5 months

Start Month/Year for SubPhase Building: Jun '09

SubPhase Building Duration: .25 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jun '09

SubPhase Architectural Coatings Duration: .125 months

Start Month/Year for SubPhase Asphalt: Jun '09

SubPhase Asphalt Duration: .125 months

Acres to be Paved: 0.07

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily
has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily
has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int14.urb
 Project Name: Playa Vista (Offsite Improvements--Int#14 La Tijera Blvd. and Centinela Ave.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009 ***							
TOTALS (lbs/day,unmitigated)	10.56	67.52	88.81	0.00	36.20	2.57	33.63
TOTALS (lbs/day, mitigated)	10.56	67.52	88.81	0.00	5.57	2.57	3.00

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int14.urb
 Project Name: Playa Vista (Offsite Improvements--Int#14 La Tijera Blvd. and Centinela Ave.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 2
 Total Land Use Area to be Developed: 0.88 acres
 Maximum Acreage Disturbed Per Day: 0.88 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	5.96	41.01	47.39	-	1.73	1.73	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.08	0.12	2.32	0.00	0.01	0.00	0.01
Maximum lbs/day	6.08	41.84	49.86	0.00	2.07	1.75	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.99	-	2.99
Off-Road Diesel	10.45	67.07	86.13	-	2.56	2.56	0.00
On-Road Diesel	0.02	0.32	0.07	0.00	0.01	0.01	0.00
Worker Trips	0.09	0.13	2.61	0.00	0.01	0.00	0.01
Maximum lbs/day	10.56	67.52	88.81	0.00	5.57	2.57	3.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.05	-	-	-	-	-	-
Asphalt Off-Road Diesel	5.22	31.67	43.82	-	1.01	1.01	0.00
Asphalt On-Road Diesel	0.01	0.14	0.03	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.02	0.01	0.29	0.00	0.01	0.00	0.01
Maximum lbs/day	9.62	61.06	78.57	0.00	2.23	2.22	0.01
Max lbs/day all phases	10.56	67.52	88.81	0.00	5.57	2.57	3.00

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

Phase 1 - Demolition Assumptions

Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 27989.29
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
4	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .5 months

On-Road Truck Travel (VMT): 18

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
1	Scrapers	313	0.660	8.3
4	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jul '09

Phase 3 Duration: 1 months

Start Month/Year for SubPhase Building: Jul '09

SubPhase Building Duration: 1 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jul '09

SubPhase Architectural Coatings Duration: .5 months

Start Month/Year for SubPhase Asphalt: Jul '09

SubPhase Asphalt Duration: .5 months

Acres to be Paved: 0.22

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Paving Equipment	111	0.530	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily

has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph

has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int77.urb
 Project Name: Playa Vista (Offsite Improvements--Int#77 Inglewood Blvd. and Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	9.20	58.57	77.33	0.00	14.81	2.19	12.62
TOTALS (lbs/day, mitigated)	9.20	58.57	77.33	0.00	3.32	2.19	1.13

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int77.urb
 Project Name: Playa Vista (Offsite Improvements--Int#77 Inglewood Blvd. and Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 2
 Total Land Use Area to be Developed: 0.33 acres
 Maximum Acreage Disturbed Per Day: 0.33 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	5.96	41.01	47.39	-	1.73	1.73	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.08	0.12	2.32	0.00	0.01	0.00	0.01
Maximum lbs/day	6.08	41.84	49.86	0.00	2.07	1.75	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	1.12	-	1.12
Off-Road Diesel	9.10	57.83	75.45	-	2.17	2.17	0.00
On-Road Diesel	0.04	0.65	0.14	0.00	0.02	0.02	0.00
Worker Trips	0.06	0.09	1.74	0.00	0.01	0.00	0.01
Maximum lbs/day	9.20	58.57	77.33	0.00	3.32	2.19	1.13
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.04	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.01	0.12	0.03	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.02	0.01	0.23	0.00	0.00	0.00	0.00
Maximum lbs/day	8.53	53.63	69.96	0.00	1.90	1.90	0.00
Max lbs/day all phases	9.20	58.57	77.33	0.00	3.32	2.19	1.13

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
 Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .5 months
 Building Volume Total (cubic feet): 14496.16
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
4	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .5 months

On-Road Truck Travel (VMT): 38

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
1	Scrapers	313	0.660	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jul '09

Phase 3 Duration: 1 months

Start Month/Year for SubPhase Building: Jul '09

SubPhase Building Duration: 1 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jul '09

SubPhase Architectural Coatings Duration: .5 months

Start Month/Year for SubPhase Asphalt: Jul '09

SubPhase Asphalt Duration: .5 months

Acres to be Paved: 0.18

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily

has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph

has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int99.urb
 Project Name: Playa Vista (Offsite Improvements--Int#99 Washington Place and Centinela Ave.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	8.74	54.13	70.99	0.00	10.33	1.92	8.41
TOTALS (lbs/day, mitigated)	8.74	54.13	70.99	0.00	2.68	1.92	0.76

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int99.urb
 Project Name: Playa Vista (Offsite Improvements--Int#99 Washington Place and Centinela Ave.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 1
 Total Land Use Area to be Developed: 0.22 acres
 Maximum Acreage Disturbed Per Day: 0.22 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	4.62	31.77	36.71	-	1.34	1.34	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	4.71	32.55	38.31	0.00	1.68	1.36	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.75	-	0.75
Off-Road Diesel	5.33	34.87	43.35	-	1.34	1.34	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	5.38	34.94	44.80	0.00	2.10	1.34	0.76
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.21	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.04	0.57	0.14	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.04	0.06	1.16	0.00	0.00	0.00	0.00
Maximum lbs/day	8.74	54.13	70.99	0.00	1.93	1.92	0.01
Max lbs/day all phases	8.74	54.13	70.99	0.00	2.68	1.92	0.76

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
 Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .25 months
 Building Volume Total (cubic feet): 9292.96
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .25 months

On-Road Truck Travel (VMT): 0

Off-Road Equipment				
No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '09

Phase 3 Duration: .5 months

Start Month/Year for SubPhase Building: Jun '09

SubPhase Building Duration: .25 months

Off-Road Equipment				
No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jun '09

SubPhase Architectural Coatings Duration: .125 months

Start Month/Year for SubPhase Asphalt: Jun '09

SubPhase Asphalt Duration: .125 months

Acres to be Paved: 0.22

Off-Road Equipment				
No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily

has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph

has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int100.urb
 Project Name: Playa Vista (Offsite Improvements--Int#100 Overland Ave. & Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	8.54	53.67	70.88	0.00	6.66	1.91	4.75
TOTALS (lbs/day, mitigated)	8.54	53.67	70.88	0.00	2.34	1.91	0.43

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int100.urb
 Project Name: Playa Vista (Offsite Improvements--Int#100 Overland Ave. & Culver Blvd.)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 1
 Total Land Use Area to be Developed: 0.124 acres
 Maximum Acreage Disturbed Per Day: 0.124 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	4.62	31.77	36.71	-	1.34	1.34	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	4.71	32.55	38.31	0.00	1.68	1.36	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.42	-	0.42
Off-Road Diesel	5.33	34.87	43.35	-	1.34	1.34	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	5.38	34.94	44.80	0.00	1.77	1.34	0.43
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.04	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.04	0.06	1.16	0.00	0.00	0.00	0.00
Maximum lbs/day	8.54	53.67	70.88	0.00	1.91	1.91	0.00
Max lbs/day all phases	8.54	53.67	70.88	0.00	2.34	1.91	0.43

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
 Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .25 months
 Building Volume Total (cubic feet): 9292.96
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .25 months

On-Road Truck Travel (VMT): 0

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '09

Phase 3 Duration: .5 months

Start Month/Year for SubPhase Building: Jun '09

SubPhase Building Duration: .25 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jun '09

SubPhase Architectural Coatings Duration: .125 months

Start Month/Year for SubPhase Asphalt: Jun '09

SubPhase Asphalt Duration: .125 months

Acres to be Paved: 0.04

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2

Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185

Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185

Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly

has been changed from off to on.

Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily

has been changed from off to on.

Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily

has been changed from off to on.

Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph

has been changed from off to on.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int102.urb
 Project Name: Playa Vista (Offsite Improvements--Int#102 Sawtelle Avenue & Culver Boulevard)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	8.54	53.67	70.88	0.00	4.21	1.91	2.30
TOTALS (lbs/day, mitigated)	8.54	53.67	70.88	0.00	2.23	1.91	0.32

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Construction\Int102.urb
 Project Name: Playa Vista (Offsite Improvements--Int#102 Sawtelle Avenue & Culver Boulevard)
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: June, 2009
 Construction Duration: 1
 Total Land Use Area to be Developed: 0.06 acres
 Maximum Acreage Disturbed Per Day: 0.06 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	4.62	31.77	36.71	-	1.34	1.34	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	4.71	32.55	38.31	0.00	1.68	1.36	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.29	-	2.29
Off-Road Diesel	5.33	34.87	43.35	-	1.34	1.34	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	5.38	34.94	44.80	0.00	3.64	1.34	2.30
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.04	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.04	0.06	1.16	0.00	0.00	0.00	0.00
Maximum lbs/day	8.54	53.67	70.88	0.00	1.91	1.91	0.00
Max lbs/day all phases	8.54	53.67	70.88	0.00	4.21	1.91	2.30

Phase 1 - Demolition Assumptions
 Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .25 months
 Building Volume Total (cubic feet): 2500
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions
 Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .25 months
 On-Road Truck Travel (VMT): 0

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '09
 Phase 3 Duration: .5 months
 Start Month/Year for SubPhase Building: Jun '09
 SubPhase Building Duration: .25 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jun '09
 SubPhase Architectural Coatings Duration: .125 months
 Start Month/Year for SubPhase Asphalt: Jun '09
 SubPhase Asphalt Duration: .125 months
 Acres to be Paved: 0.04

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.31	-	0.31
Off-Road Diesel	4.62	31.77	36.71	-	1.34	1.34	0.00
On-Road Diesel	0.04	0.71	0.15	0.00	0.02	0.02	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	4.71	32.55	38.31	0.00	1.68	1.36	0.32
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.20	-	0.20
Off-Road Diesel	5.33	34.87	43.35	-	1.34	1.34	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.07	1.45	0.00	0.01	0.00	0.01
Maximum lbs/day	5.38	34.94	44.80	0.00	1.55	1.34	0.21
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	4.31	29.24	34.43	-	1.20	1.20	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.04	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.15	24.27	35.27	-	0.70	0.70	0.00
Asphalt On-Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.04	0.06	1.16	0.00	0.00	0.00	0.00
Maximum lbs/day	8.54	53.67	70.88	0.00	1.91	1.91	0.00
Max lbs/day all phases	8.54	53.67	70.88	0.00	2.23	1.91	0.32

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
 Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
 Phase 2: Soil Disturbance: Water exposed surfaces - 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 50.0%)
 Phase 2: Stockpiles: Cover all stock piles with tarps
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
 Phase 2: Unpaved Roads: Water all haul roads 3x daily
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 45.0%)
 Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)

Phase 1 - Demolition Assumptions

Start Month/Year for Phase 1: Jun '09
 Phase 1 Duration: .25 months
 Building Volume Total (cubic feet): 2500
 Building Volume Daily (cubic feet): 729
 On-Road Truck Travel (VMT): 42
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Jun '09
 Phase 2 Duration: .25 months

On-Road Truck Travel (VMT): 0
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Other Equipment	190	0.620	8.3
2	Tractor/Loaders/Backhoes	79	0.465	8.3

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jun '09
 Phase 3 Duration: .5 months
 Start Month/Year for SubPhase Building: Jun '09
 SubPhase Building Duration: .25 months
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.3
1	Cranes	190	0.430	2.0
1	Other Equipment	190	0.620	8.3
1	Tractor/Loaders/Backhoes	79	0.465	8.3

Start Month/Year for SubPhase Architectural Coatings: Jun '09

SubPhase Architectural Coatings Duration: .125 months

Start Month/Year for SubPhase Asphalt: Jun '09

SubPhase Asphalt Duration: .125 months

Acres to be Paved: 0.04

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.3
1	Pavers	132	0.590	8.3
1	Rollers	114	0.430	8.3

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
 Site Grading Fugitive Dust Emission Rate changed from 10 to 38.2
 Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.00185
 Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.00185
 Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
 has been changed from off to on.
 Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
 has been changed from off to on.
 Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 3x daily
 has been changed from off to on.
 Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
 has been changed from off to on.
 Phase 2 mitigation measure Unpaved Roads: Water all haul roads 3x daily
 has been changed from off to on.
 Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
 has been changed from off to on.

E-5c

Operation Emissions

Playa Vista Area D - Concurrent Construction and Operation (2009)

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROG	SOx
Project					
Area	721	56	128	390	20
Mobile	1866	225	227	175	1
Stationary	17	88	2	2	6
Total Project	2604	369	357	567	27
SCAQMD Standard	550	55	150	55	150
Difference	2,054	314	207	512	(123)
Significant?	Yes	Yes	Yes	Yes	No

Playa Vista Area D - Concurrent Construction and Operation (2009)

Electricity and Natural Gas Usage

Electricity Usage

Land Use	1,000 Sqft	Electricity	Total Electricity Usage		Emission Factors (lbs/MWh) ^b				
		Usage Rate ^a			CO	ROC	NOx	PM10	SOx
		(kWh/sq.ft/yr)	(KWh/year)	(MWh/Day)	0.2	0.01	1.15	0.04	0.12
Project									
Office	175.0	12.95	2,266,250	6.209	1.242	0.062	7.140	0.248	0.745
Retail	150.0	13.55	2,032,500	5.568	1.114	0.056	6.404	0.223	0.668
Miscellaneous	40.0	10.5	420,000	1.151	0.230	0.012	1.323	0.046	0.138
Residential (DU)	2440.0	5,627	13,728,660	37.613	7.523	0.376	43.255	1.505	4.514
Total Project			18,447,410	50.541	10.11	0.51	58.12	2.02	6.07
Net Emissions From Electricity Usage					10.11	0.51	58.12	2.02	6.07

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas	Total Natural Gas Usage		Emission Factors (lbs/Mcuft) ^d				
		Usage Rate ^c			CO	ROC	NOx	PM10	SOx
		(cu.ft/sq.ft/mo)	(cu.ft/mo)	(cu.ft/DAY)	20	5.3	120/80 ^e	0.2	0
Project									
Office	175.0	2.0	350,000	11,667	0.233	0.062	1.400	0.002	--
Retail	150.0	2.9	435,000	14,500	0.290	0.077	1.740	0.003	--
Miscellaneous	40.0	2.9	116,000	3,867	0.077	0.020	0.464	0.001	--
Residential (Multi-Family DU)	2440.0	4,012	9,788,060	326,269	6.525	1.729	26.101	0.065	--
Total Project			10,689,060	356,302	7.13	1.89	29.71	0.07	--
Net Emissions From Natural Gas Usage					7.13	1.89	29.71	0.07	--

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.00	0.00	0.00	0.00	0.00
Total Project Emissions (lbs/day)	17.24	2.39	87.83	2.09	6.07
Total Net Emissions (lbs/day)	17.24	2.39	87.83	2.09	6.07

^a Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

^b Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

^c Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

^d Emission Factors from Table A9-12-B, CEQA Air Quality Handbook, SCAQMD, 1993.

^e The emission factors for NOx in lbs per million cuft of natural gas are 120 for nonresidential uses and 80 for residential uses.

URBEMIS 2002 For Windows 7.4.2

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Regional Ops\2003 Worksheets\URBEMIS 2002\concurrent operations and construction - 2009.urb
 Project Name: The Village at Playa Vista
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	39.61	61.41	444.34	0.29	53.57
Condo/townhouse general	67.54	104.83	758.48	0.50	91.45
Strip mall	36.27	61.42	427.90	0.27	52.54
General office building	16.57	28.22	197.42	0.13	24.72
Government (civic center)	3.26	5.47	38.18	0.02	4.71
TOTAL EMISSIONS (lbs/day)	163.25	261.36	1,866.32	1.22	226.99

Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Temperature (F): 60 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments low rise	5.75 trips / dwelling units	918.00	5,278.50
Condo/townhouse general	5.92 trips / dwelling units	1,522.00	9,010.24
Strip mall	41.29 trips / 1000 sq. ft.	150.00	6,193.05
General office building	12.98 trips / 1000 sq. ft.	175.00	2,270.98
Government (civic center)	13.00 trips / 1000 sq. ft.	40.00	520.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent	Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90		1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10		2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10		1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30		1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10		0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30		0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00		0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90		0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00		0.00	0.00	100.00
Urban Bus	0.20		0.00	50.00	50.00
Motorcycle	1.60		75.00	25.00	0.00
School Bus	0.10		0.00	0.00	100.00
Motor Home	1.40		7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2009.
 The operational winter temperature changed from 50 to 60.
 The operational summer temperature changed from 90 to 75.
 The operational summer selection item changed from 8 to 5.
 The double counting internal work trip limit changed from to 970.70225.
 The double counting shopping trip limit changed from to 485.351125.
 The double counting other trip limit changed from to 6144.1582.
 The travel mode environment settings changed from both to: none

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Regional Ops\2003 Worksheets\URBEMIS 2002\concurrent
 operations and construction - 2009.urb
 Project Name: The Village at Playa Vista
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	39.17	52.80	422.13	0.31	53.57
Condo/townhouse general	66.52	90.13	720.56	0.52	91.45
Strip mall	31.50	52.90	399.75	0.30	52.54
General office building	15.14	24.26	188.25	0.14	24.72
Government (civic center)	3.00	4.71	35.88	0.03	4.71

TOTAL EMISSIONS (lbs/day) 155.33 224.81 1,766.57 1.29 226.99

Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments low rise	5.75 trips / dwelling units	918.00	5,278.50
Condo/townhouse general	5.92 trips / dwelling units	1,522.00	9,010.24
Strip mall	41.29 trips / 1000 sq. ft.	150.00	6,193.05
General office building	12.98 trips / 1000 sq. ft.	175.00	2,270.98
Government (civic center)	13.00 trips / 1000 sq. ft.	40.00	520.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Government (civic center)				10.0	5.0	85.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2009.
 The operational winter temperature changed from 50 to 60.
 The operational summer temperature changed from 90 to 75.
 The operational summer selection item changed from 8 to 5.
 The double counting internal work trip limit changed from to 970.70225.
 The double counting shopping trip limit changed from to 485.351125.
 The double counting other trip limit changed from to 6144.1582.
 The travel mode environment settings changed from both to: none

File Name: V:\PROJECTS\AIR QUALITY DIVISION\Projects\Playa Vista 2002\D Only\Regional Ops\2003 Worksheets\URBEMIS 2002\concurrent operations and construction - 2009.urb
 Project Name: The Village at Playa Vista
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	44.87	48.75	477.16	0.31	53.57
Condo/townhouse general	76.06	83.22	814.50	0.53	91.45
Strip mall	33.88	48.86	450.81	0.30	52.54
General office building	16.67	22.39	213.64	0.14	24.72
Government (civic center)	3.32	4.35	40.54	0.03	4.71
TOTAL EMISSIONS (lbs/day)	174.81	207.57	1,996.65	1.32	226.99

Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments low rise	5.75 trips / dwelling units	918.00	5,278.50
Condo/townhouse general	5.92 trips / dwelling units	1,522.00	9,010.24
Strip mall	41.29 trips / 1000 sq. ft.	150.00	6,193.05
General office building	12.98 trips / 1000 sq. ft.	175.00	2,270.98
Government (civic center)	13.00 trips / 1000 sq. ft.	40.00	520.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2009.
 The operational winter temperature changed from 50 to 60.
 The operational summer temperature changed from 90 to 85.
 The operational summer selection item changed from 8 to 6.
 The double counting internal work trip limit changed from to 970.70225.
 The double counting shopping trip limit changed from to 485.351125.
 The double counting other trip limit changed from to 6144.1582.
 The travel mode environment settings changed from both to: none

Playa Vista - Area D Concurrent Construction and Operation (2009)

Summary of Area Source Emissions

Population: ^a	<div>Project</div> <div>6548</div>				
	Emissions (lbs/day)				
	CO	ROC	NO _x	PM ₁₀	SO _x
Solvent Usage	--	114	--	--	--
Surface Coating	--	124	--	--	--
Forklifts	469	18	23	2	--
Charbroilers	--	3	--	22	--
Emergency Generators	6	0.7	14	61	13
Landscaping and Garden	6	0.7	0.06	0.0013	0
Miscellaneous Sources ^b	240	130	19	43	7
Total	721	390	56	128	20

^a Population equals 5,720 residents less 160 residences with 2.2 people per residence plus 1,180 employees.

^b Miscellaneous sources equal 0.5 all area sources to account for unforeseen sources.

Playa Vista - Area D Concurrent Construction and Operation (2009)

Commercial/ Consumer Solvent Use

AP-42 Section 4.10

WITH PROJECT

Number of People	6548
Nonmethane VOC emissions per capita (lb/day)	0.0252
Nonmethane VOC emissions (lb/day)	165.0096

VOC EMISSIONS 165.0

ROC EMISSIONS (69% of VOC) 113.9

a Includes emissions from aerosol products, household products, toiletries, rubbing compounds, windshield washing, polishes and waxes, nonindustrial adhesives, space deodorant, moth control, and laundry detergent.

Nonindustrial Surface Coating

AP-42 Section 4.2.1

	Architectural Surface Coating	Automobile Refinishing
WITH PROJECT		
Number of People	6548	6548
VOC emissions per capita (lb/day)	0.013	0.006
VOC emissions (lb/day)	85.124	39.288
VOC EMISSIONS	85.1	39.3
TOTAL VOC EMISSIONS (surface coating + auto refinishing)		<u>124.4</u>

Charbroilers

Source: SCAQMD, 1997

Number of Restaurants	4
Lbs of meat cooked per day per restaurant ^b	166
Emission factors (lbs/ 1000 lbs cooked)	
ROC (assumed to be equivalent to VOC)	3.94
PM	32.67
Emissions (lbs/day)	
ROC	<u>2.6</u>
PM	<u>21.7</u>

b based on information provided at www.burgerking.com

Playa Vista - Area D Concurrent Construction and Operation (2009)

Forklifts

CEQA Handbook Table A9-8-A

	Number	Hours per Day	Emission Factors (lbs/hr)				Emissions (lbs/day)			
			CO	ROC	NOx	PM10	CO	ROC	NOx	PM10
GAS										
Fork Lift - 50 Hp	1	8	14.0	0.5	0.018	0.003	112.0	4	0.144	0.024
Fork Lift - 175 Hp	1	8	43.97	1.53	0.92	0.123	351.76	12.24	7.36	0.984
DIESEL										
Fork Lift - 50 Hp	1	8	0.18	0.053	0.441	0.031	1.44	0.424	3.528	0.248
Fork Lift - 175 Hp	1	8	0.52	0.17	1.54	0.093	4.16	1.36	12.32	0.744
TOTAL	4	32					469.4	18.0	23.4	2.0

Diesel-Powered Emergency Generators

AP-42 Section 3.4.1

Power Rating: 350 kW

Annual Hours of Use: 500^a

% Sulfur in fuel oil: 1.5

	Number	Emission Factors (lbs/hp-hr)							Emissions (lbs/day)						
		CO	TOC	Non-methane TOC	NOx	NOx (controlled)	PM10	SOx	CO	TOC	Non-methane TOC	NOx	NOx (controlled)	PM10	SOx
Diesel Generator	3	0.0055	7.05E-04	6.42E-04	0.024	0.013	0.0573	0.0121	5.9	0.8	0.7	25.7	13.9	61.5	13.0

^a Calculating Potential to Emit for Emergency Generators, EPA, September 1995.

Playa Vista - Area D

Analysis of Emissions from Landscaping Operations For Concurrent Construction and Operation (2009)

Landscaped Acreage Calculations

Use	Proposed Action (Area D)
Active Park Acreage	10.2
Total Developed Acreage*	87.4
Total Landscaped Acreage (50%(Total Developed Area) + Active Park Area)**	45.8

*92 acres less five acres for undeveloped land.

**Total Developed Area is multiplied by 50% based on average lot coverage restrictions for the area.

Lawn & Garden Engine Emissions

Statewide 2005

Emissions in tons/day (from Table K-3, Appendix M, Offroad Vehicle Emissions Inventory and CO Credits)

	Engine Population	% of Total	Fuel Consump.	Exhaust PM	Exhaust PM10 =19% PM*	Exhaust Nox	Exhaust CO	Exhaust ROG	Evap ROG	Container ROG	Dist. S&T ROG	Sum ROG
2-stroke < 25 hp	2153439	40.52%	63293	0.16	0.03	0.61	71.78	23.33	1.17	1.90	0.11	26.50
4-stroke < 25 hp	3097046	58.28%	117964	0.13	0.02	2.42	241.63	9.33	4.66	3.54	0.20	17.74
2-stroke > 25 hp	497	0.01%	2167	0.00	0.00	0.04	2.84	0.07	0.00	0.02	0.00	0.10
4-stroke > 25 hp	63540	1.20%	30515	0.17	0.03	1.10	65.21	1.75	0.88	0.88	0.05	2.98
Total	5314522	100.00%	213939	0.46	0.09	4.17	381.46	34.48	6.71	6.34	0.36	47.32
Avg. Emissions per Engine in tons/ day (fuel in gal./day)			0.040256	8.66E-08	1.64E-08	7.85E-07	7.18E-05	6.49E-06	1.26E-06	1.19E-06	6.77E-08	8.9E-06
Engine Population for Proposed Action =	40	**										
Emissions per Day for Proposed Action in tons/ day (fuel in gal./day)			1.610222	3.46E-06	6.58E-07	3.14E-05	0.002871	0.00026	5.05E-05	4.77E-05	2.71E-06	0.000356
Emissions per Day for Proposed Action in pounds/ day (fuel in gal./day)			1.6	0.007	0.0013	0.06	5.7	0.5	0.10	0.10	0.005	0.7

*Source: CEPA ARB, "A Report to the California Legislature on the Potential Health and Environmental Impacts of Leaf Blowers", Mobile Source Control Division, February 2000.

**Assuming 3 min engine use/100 sf landscaping, biweekly maintenance; Source: January 8, 1998 press release from Aero Air Pollution, Los Angeles.