

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version 8.7\Projects2k2\North Douglas II.urb
 Project Name: north douglas II
 Project Location: Lower Sacramento Valley Air Basin
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: June, 2006
 Construction Duration: 12
 Total Land Use Area to be Developed: 17.7 acres
 Maximum Acreage Disturbed Per Day: 4.4 acres
 Single Family Units: 153 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
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	44.00	-	44.00
Off-Road Diesel	12.15	83.07	97.43	-	3.59	3.59	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.16	2.93	0.00	0.01	0.00	0.01
Maximum lbs/day	12.29	83.23	100.36	0.00	47.60	3.59	44.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.76	22.04	19.62	-	1.02	1.02	0.00
Bldg Const Worker Trips	0.72	0.43	9.16	0.00	0.11	0.01	0.10
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	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.48	22.48	28.78	0.00	1.13	1.03	0.10
Max lbs/day all phases	12.29	83.23	100.36	0.00	47.60	3.59	44.01

*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.76	21.03	20.39	-	0.94	0.94	0.00
Bldg Const Worker Trips	0.67	0.41	8.61	0.00	0.11	0.01	0.10
Arch Coatings Off-Gas	568.44	-	-	-	-	-	-
Arch Coatings Worker Trips	0.60	0.28	7.07	0.00	0.11	0.01	0.10
Asphalt Off-Gas	1.81	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.99	5.88	8.41	-	0.19	0.19	0.00
Asphalt On-Road Diesel	0.29	4.69	1.06	0.01	0.13	0.12	0.01
Asphalt Worker Trips	0.01	0.00	0.06	0.00	0.00	0.00	0.00
Maximum lbs/day	575.49	32.16	44.06	0.01	1.47	1.26	0.21
Max lbs/day all phases	575.49	32.16	44.06	0.01	1.47	1.26	0.21

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Jun '06

Phase 2 Duration: 1.3 months

On-Road Truck Travel (VMT): 0

Off-Road Equipment

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

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jul '06

Phase 3 Duration: 10.7 months

Start Month/Year for SubPhase Building: Jul '06

SubPhase Building Duration: 10.7 months

Off-Road Equipment

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

Start Month/Year for SubPhase Architectural Coatings: Apr '07

SubPhase Architectural Coatings Duration: 1.1 months

Start Month/Year for SubPhase Asphalt: May '07

SubPhase Asphalt Duration: 0.5 months

Acres to be Paved: 7.6

Off-Road Equipment

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

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.15	1.92	0.82	0	0.00
Hearth	0.04	0.70	0.30	0.00	0.06
Landscaping - No winter emissions					
Consumer Prdcts	7.49	-	-	-	-
Architectural Coatings	5.21	-	-	-	-
TOTALS (lbs/day, unmitigated)	12.88	2.62	1.11	0.00	0.06

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	11.80	18.52	142.71	0.11	10.67
City park	0.05	0.08	0.61	0.00	0.05
TOTAL EMISSIONS (lbs/day)	11.85	18.60	143.32	0.11	10.72

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2006 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	17.70	7.88 trips/dwelling unit	153.00	1,205.64
City park		1.59 trips/acres	4.00	6.36
			Sum of Total Trips	1,212.00
			Total Vehicle Miles Traveled	7,049.75

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.60	2.20	97.30	0.50
Light Truck < 3,750 lbs	15.10	4.00	93.40	2.60
Light Truck 3,751- 5,750	15.90	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.00	1.40	95.70	2.90
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	10.00	20.00	70.00
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	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	0.00	91.70	8.30

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Single family housing
have changed from the defaults 9.57/51. to 7.88/17.7

Changes made to the default values for Construction

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.

The wood fireplace percentage changed from 10 to 0.

The no hearth options percentage changed from 0 to 45.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2006.

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DETAIL REPORT
(Pounds/Day - Summer)

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 Total Land Use Area to be Developed: 17.7 acres
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 Single Family Units: 153 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
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	44.00	-	44.00
Off-Road Diesel	12.15	83.07	97.43	-	3.59	3.59	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.14	0.16	2.93	0.00	0.01	0.00	0.01
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Bldg Const Worker Trips	0.72	0.43	9.16	0.00	0.11	0.01	0.10
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	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.76	21.03	20.39	-	0.94	0.94	0.00
Bldg Const Worker Trips	0.67	0.41	8.61	0.00	0.11	0.01	0.10
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Arch Coatings Worker Trips	0.60	0.28	7.07	0.00	0.11	0.01	0.10
Asphalt Off-Gas	1.81	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.99	5.88	8.41	-	0.19	0.19	0.00
Asphalt On-Road Diesel	0.29	4.69	1.06	0.01	0.13	0.12	0.01
Asphalt Worker Trips	0.01	0.00	0.06	0.00	0.00	0.00	0.00
Maximum lbs/day	575.49	32.16	44.06	0.01	1.47	1.26	0.21
Max lbs/day all phases	575.49	32.16	44.06	0.01	1.47	1.26	0.21

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Jun '06

Phase 2 Duration: 1.3 months

On-Road Truck Travel (VMT): 0

Off-Road Equipment

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

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jul '06

Phase 3 Duration: 10.7 months

Start Month/Year for SubPhase Building: Jul '06

SubPhase Building Duration: 10.7 months

Off-Road Equipment

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

Start Month/Year for SubPhase Architectural Coatings: Apr '07

SubPhase Architectural Coatings Duration: 1.1 months

Start Month/Year for SubPhase Asphalt: May '07

SubPhase Asphalt Duration: 0.5 months

Acres to be Paved: 7.6

Off-Road Equipment

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

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.15	1.92	0.82	0	0.00
Hearth - No summer emissions					
Landscaping	1.00	0.04	6.55	0.07	0.03
Consumer Prdcts	7.49	-	-	-	-
Architectural Coatings	5.21	-	-	-	-
TOTALS (lbs/day, unmitigated)	13.85	1.95	7.36	0.07	0.03

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	11.47	12.24	126.59	0.11	10.67
City park	0.09	0.05	0.52	0.00	0.05
TOTAL EMISSIONS (lbs/day)	11.57	12.29	127.11	0.11	10.72

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2006 Temperature (F): 85 Season: Summer

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Light Truck 3,751- 5,750	15.90	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.00	1.40	95.70	2.90
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	10.00	20.00	70.00
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	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	0.00	91.70	8.30

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
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Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5

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Changes made to the default values for Operations

The operational emission year changed from 2005 to 2006.