URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>
Project Name: Fiddler-Green
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2005 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	27.11	217.75	195.40	0.00	56.10	10.09	46.01

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	493.16	127.48	135.98	0.07	5.69	5.54	0.15

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	10.40	1.48	4.99	0.05	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	10.32	11.29	119.75	0.07	10.57

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	20.73	12.77	124.74	0.12	10.59

URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>
Project Name: Fiddler-Green
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, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 18.5 acres
Maximum Acreage Disturbed Per Day: 4.6 acres
Single Family Units: 116 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
*** 2005***							
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	-	-	-	-	46.00	-	46.00
Off-Road Diesel	26.83	217.43	189.59	-	10.08	10.08	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.28	0.32	5.81	0.00	0.02	0.01	0.01
Maximum lbs/day	27.11	217.75	195.40	0.00	56.10	10.09	46.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	11.99	100.34	82.12	-	4.68	4.68	0.00
Bldg Const Worker Trips	0.58	0.34	7.32	0.00	0.08	0.01	0.07
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	12.57	100.68	89.43	0.00	4.75	4.68	0.07
Max lbs/day all phases	27.11	217.75	195.40	0.00	56.10	10.09	46.01
*** 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	-	-	-	-	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	11.99	95.90	85.35	-	4.44	4.44	0.00
Bldg Const Worker Trips	0.55	0.33	6.94	0.00	0.08	0.01	0.07
Arch Coatings Off-Gas	474.07	-	-	-	-	-	-
Arch Coatings Worker Trips	0.49	0.23	5.70	0.00	0.08	0.01	0.07
Asphalt Off-Gas	1.38	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.47	27.19	38.01	-	0.98	0.98	0.00
Asphalt On-Road Diesel	0.24	3.92	0.87	0.07	0.10	0.10	0.00
Asphalt Worker Trips	0.03	0.01	0.34	0.00	0.00	0.00	0.00
Maximum lbs/day	493.16	127.48	135.98	0.07	5.69	5.54	0.15
Max lbs/day all phases	493.16	127.48	135.98	0.07	5.69	5.54	0.15

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Graders	174	0.575	8.0
4	Off Highway Tractors	255	0.410	8.0
4	Rubber Tired Dozers	352	0.590	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Jul '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Tractors	255	0.410	8.0
4	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: May '06
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: May '06
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 5.8
Off-Road Equipment

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

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.11	1.45	0.62	0	0.00
Hearth	65.84	2.28	120.43	0.29	17.95
Landscaping - No winter emissions					
Consumer Prdcts	5.68	-	-	-	-
Architectural Coatings	3.95	-	-	-	-
TOTALS(lbs/day,unmitigated)	75.58	3.73	121.05	0.29	17.95

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	10.99	17.05	133.20	0.06	10.57
TOTAL EMISSIONS (lbs/day)	10.99	17.05	133.20	0.06	10.57

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 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	18.50	10.27 trips/dwelling unit	116.00	1,191.32
		Sum of Total Trips		1,191.32
		Total Vehicle Miles Traveled		6,936.70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
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	0.10	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	8.30	83.30	8.40

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			

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 9.57/38.67 to 10.27/18.5

Changes made to the default values for Construction

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2007.
The operational winter selection item changed from 2 to 1.
The operational summer selection item changed from 7 to 6.
The home based work selection item changed from 8 to 7.
The home based shopping selection item changed from 8 to 7.
The home based other selection item changed from 8 to 7.
The commercial based commute selection item changed from 8 to 7.
The commercial based non-work selection item changed from 8 to 7.
The commercial based customer selection item changed from 8 to 7.

URBEMIS 2002 For Windows 8.7.0

File Name: <Not Saved>
Project Name: Fiddler-Green
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 18.5 acres
Maximum Acreage Disturbed Per Day: 4.6 acres
Single Family Units: 116 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
*** 2005***							
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	-	-	-	-	46.00	-	46.00
Off-Road Diesel	26.83	217.43	189.59	-	10.08	10.08	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.28	0.32	5.81	0.00	0.02	0.01	0.01
Maximum lbs/day	27.11	217.75	195.40	0.00	56.10	10.09	46.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	11.99	100.34	82.12	-	4.68	4.68	0.00
Bldg Const Worker Trips	0.58	0.34	7.32	0.00	0.08	0.01	0.07
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	12.57	100.68	89.43	0.00	4.75	4.68	0.07
Max lbs/day all phases	27.11	217.75	195.40	0.00	56.10	10.09	46.01
*** 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	-	-	-	-	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	11.99	95.90	85.35	-	4.44	4.44	0.00
Bldg Const Worker Trips	0.55	0.33	6.94	0.00	0.08	0.01	0.07
Arch Coatings Off-Gas	474.07	-	-	-	-	-	-
Arch Coatings Worker Trips	0.49	0.23	5.70	0.00	0.08	0.01	0.07
Asphalt Off-Gas	1.38	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.47	27.19	38.01	-	0.98	0.98	0.00
Asphalt On-Road Diesel	0.24	3.92	0.87	0.07	0.10	0.10	0.00
Asphalt Worker Trips	0.03	0.01	0.34	0.00	0.00	0.00	0.00
Maximum lbs/day	493.16	127.48	135.98	0.07	5.69	5.54	0.15
Max lbs/day all phases	493.16	127.48	135.98	0.07	5.69	5.54	0.15

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '05
Phase 2 Duration: 1.2 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Graders	174	0.575	8.0
4	Off Highway Tractors	255	0.410	8.0
4	Rubber Tired Dozers	352	0.590	8.0
2	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '05
Phase 3 Duration: 10.2 months
Start Month/Year for SubPhase Building: Jul '05
SubPhase Building Duration: 10.2 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Tractors	255	0.410	8.0
4	Other Equipment	190	0.620	8.0

Start Month/Year for SubPhase Architectural Coatings: May '06
SubPhase Architectural Coatings Duration: 1 months
Start Month/Year for SubPhase Asphalt: May '06
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 5.8
Off-Road Equipment

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

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.11	1.45	0.62	0	0.00
Hearth - No summer emissions					
Landscaping	0.67	0.02	4.37	0.05	0.02
Consumer Prdcts	5.68	-	-	-	-
Architectural Coatings	3.95	-	-	-	-
TOTALS(lbs/day,unmitigated)	10.40	1.48	4.99	0.05	0.02

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	10.32	11.29	119.75	0.07	10.57
TOTAL EMISSIONS (lbs/day)	10.32	11.29	119.75	0.07	10.57

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

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Single family housing	18.50	10.27 trips/dwelling unit	116.00	1,191.32
		Sum of Total Trips		1,191.32
		Total Vehicle Miles Traveled		6,936.70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
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	0.10	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	8.30	83.30	8.40

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			

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 9.57/38.67 to 10.27/18.5

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The commercial based non-work selection item changed from 8 to 7.
The commercial based customer selection item changed from 8 to 7.

FiddlerShortTermWithProject

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: FiddlerShortTerm
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=  1400. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     6 (F)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=   .1 PPM
  SIGTH=   10. DEGREES       TEMP=  7.2 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. SBCanal	-2	492	-2	0	AG	93	117.0	.0	22.5
B. NBCanal	2	0	2	492	AG	174	24.0	.0	22.5
C. WBLuther	492	2	0	2	AG	380	24.0	.0	23.4
D. EBLuther	0	-2	492	-2	AG	444	24.0	.0	23.4
E. NBCanal2	2	-492	2	0	AG	14	191.0	.0	22.5
F. SBCanal2	-2	0	-2	-492	AG	3	24.0	.0	22.5
G. EBLuther2	-492	6	0	-2	AG	552	24.0	.0	23.4
H. WBLuther2	0	2	-492	11	AG	418	24.0	.0	23.4

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-5	5	1.8
2. Recpt 2	-5	-5	1.8
3. Recpt 3	5	-5	1.8
4. Recpt 4	5	5	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: FiddlerShortTerm
```

FiddlerShortTermWithProject
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	269.	4.5	.2	.0	.0	.0	.0	.0	2.3	1.8
2. Recpt 2	1.	4.1	2.3	.8	.0	.0	.0	.0	.4	.4
3. Recpt 3	272.	4.3	.0	.0	.0	.0	.0	.0	2.2	1.6
4. Recpt 4	269.	4.8	.5	.1	.0	.0	.0	.0	2.2	1.7

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Fiddler_Cumul_SR49_Hulbert
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM          ALT=  1400. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     6 (F)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=   .1 PPM
  SIGTH=   10. DEGREES       TEMP=  7.2 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. SB49	-296	398	-2	0	AG	3711	30.0	.0	22.5
B. NB49	2	0	-282	398	AG	3057	30.0	.0	22.5
C. WBHulbert	225	528	-29	43	AG	243	40.0	.0	12.0
D. EBHulbert	-28	41	228	522	AG	171	30.0	.0	12.0
E. NB49-2	268	-417	2	0	AG	2985	24.0	.0	22.5
F. SB49-2	-2	0	253	-417	AG	3721	30.0	.0	22.5
G. EBHulbert2	-482	-122	0	-1	AG	85	40.0	.0	12.0
H. WBHulbert2	0	1	-482	-114	AG	75	30.0	.0	12.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-32	8	1.8
2. Recpt 2	-37	-36	1.8
3. Recpt 3	-6	54	1.8
4. Recpt 4	-24	78	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Fiddler_Cumul_SR49_Hulbert
```

Fiddler_Cumul_SR49_Hulbert
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	334.	13.0	7.4	5.4	.0	.0	.0	.0	.0	.0
2. Recpt 2	339.	6.9	3.6	3.0	.0	.0	.0	.0	.1	.0
3. Recpt 3	313.	11.0	5.1	5.1	.5	.3	.0	.0	.0	.0
4. Recpt 4	157.	12.1	1.0	1.6	.6	.3	3.3	5.2	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Fiddler_Cumul_SR49_Luther
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=  1400. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     6 (F)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=   .1 PPM
  SIGTH=   10. DEGREES       TEMP=  7.2 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. SB49	-296	408	-2	0	AG	3711	40.0	.0	22.5
B. NB49	2	0	-282	398	AG	3057	30.0	.0	22.5
C. WBLuther	441	224	0	1	AG	556	60.0	.0	12.0
D. EBLuther	0	-1	444	222	AG	932	30.0	.0	12.0
E. NB49-2	268	-417	2	0	AG	2873	60.0	.0	22.5
F. SB49-2	-2	0	258	-417	AG	3219	30.0	.0	22.5
G. EBLuther2	-473	-175	0	-1	AG	159	30.0	.0	12.0
H. WBLuther2	0	1	-465	-165	AG	91	30.0	.0	12.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-12	2	1.8
2. Recpt 2	-7	-7	1.8
3. Recpt 3	6	-1	1.8
4. Recpt 4	3	5	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Fiddler_Cumul_SR49_Luther
```

Fiddler_Cumul_SR49_Luther
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	143.	37.0	2.3	1.7	.0	.0	19.8	12.6	.3	.2
2. Recpt 2	142.	35.0	.0	.0	.0	.0	21.1	13.7	.1	.0
3. Recpt 3	149.	41.8	.0	.0	.3	.6	26.7	14.1	.0	.0
4. Recpt 4	150.	43.6	.6	.8	1.7	1.8	25.0	13.7	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Fiddler_Cumul_SR49_Luther_NOPROJ
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM          ALT=  1400. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     6 (F)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=   .1 PPM
  SIGTH=   10. DEGREES       TEMP=  7.2 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. SB49	-296	408	-2	0	AG	3711	30.0	.0	22.5
B. NB49	2	0	-282	398	AG	3057	30.0	.0	22.5
C. WBLuther	441	224	0	1	AG	556	40.0	.0	12.0
D. EBLuther	0	-1	444	222	AG	932	30.0	.0	12.0
E. NB49-2	268	-417	2	0	AG	2873	60.0	.0	22.5
F. SB49-2	-2	0	258	-417	AG	3219	30.0	.0	22.5
G. EBLuther2	-473	-175	0	-1	AG	159	30.0	.0	12.0
H. WBLuther2	0	1	-465	-165	AG	91	30.0	.0	12.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-12	2	1.8
2. Recpt 2	-7	-7	1.8
3. Recpt 3	6	-1	1.8
4. Recpt 4	3	5	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Fiddler_Cumul_SR49_Luther_NOPROJ
```

Fiddler_Cumul_SR49_Luther-NOPROJ
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	143.	36.4	1.7	1.7	.0	.0	19.8	12.6	.3	.2
2. Recpt 2	142.	35.0	.0	.0	.0	.0	21.1	13.7	.1	.0
3. Recpt 3	149.	41.7	.0	.0	.2	.6	26.7	14.1	.0	.0
4. Recpt 4	150.	42.9	.4	.8	1.1	1.8	25.0	13.7	.0	.0

FiddlerCumul_SR49_NewAirport

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: FiddlerCumul_SR49_NewAirport
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=    .5 M/S            Z0= 100. CM           ALT=  1400. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     6 (F)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=   .1 PPM
  SIGTH=   10. DEGREES       TEMP=  7.2 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. SB49	-296	398	-2	0	AG	3961	30.0	.0	22.5
B. NB49	2	0	-282	398	AG	2604	30.0	.0	22.5
C. WBAirport	398	296	0	2	AG	474	40.0	.0	23.4
D. EBAirport	0	-2	399	281	AG	522	32.0	.0	23.4
E. NB49-2	268	-417	2	0	AG	3237	15.0	.0	22.5
F. SB49-2	-2	0	253	-417	AG	3711	30.0	.0	22.5
G. EBAirport2	-341	-361	0	-2	AG	420	60.0	.0	23.4
H. WBAirport2	0	2	-341	-348	AG	355	30.0	.0	23.4

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-34	0	1.8
2. Recpt 2	-7	-36	1.8
3. Recpt 3	20	2	1.8
4. Recpt 4	4	20	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: FiddlerCumul_SR49_NewAirport
```

FiddlerCumul_SR49_NewAirport
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	62.	9.6	3.9	2.5	1.8	1.4	.0	.0	.0	.0
2. Recpt 2	335.	12.0	6.1	4.1	.0	.0	.0	.0	1.2	.4
3. Recpt 3	315.	16.4	7.7	6.7	1.1	.8	.0	.0	.0	.0
4. Recpt 4	315.	17.5	8.9	8.5	.0	.0	.0	.0	.0	.0

RULE 228 FUGITIVE DUST

Adopted 06-19-79
(Amended 10-19-93, 04-10-03)

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501 MONITORING
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100 GENERAL

101 PURPOSE: To reduce the amount of particulate matter entrained in the ambient air, or discharged into the ambient air, as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions.

102 APPLICABILITY: The provisions of this rule shall apply to any activity or man-made condition capable of generating fugitive dust. The provisions of this rule apply to all of Placer County.

103 EXEMPTIONS: The provisions of this rule shall not apply to:

103.1 Agricultural activities conducted and maintained for commercial agricultural purposes. If there is a question regarding whether an activity is an agricultural activity or a commercial agricultural activity, the APCO shall consult with the Agricultural Commissioner.

103.2 Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency, or to attend to uncontrolled fires.

103.3 Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.

103.4 Active operations conducted at solid waste landfills.

103.5 Active operations within State or Federal lands.

103.6 Active operations complying with California Forest Practice Rules.

103.7 Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.

103.8 Weed abatement operations, fire hazard abatement, or vegetation clearing for fire defense purposes ordered or conducted by a county agricultural commissioner, or any state, county, or municipal fire department, or that is required by a local ordinance. The provisions of this clause do not exempt the owner of any property from controlling fugitive dust emissions emanating from disturbed surface areas and inactive disturbed surface areas created as a result of the exempt activity.

103.9 Public unpaved roads that have the sole purpose of providing access to fire breaks or defensible spaces.

103.10 Unpaved roads, unless such roads:

103.10.1 Are within and part of a property undergoing development or construction; or

103.10.2 Are public unpaved roads being constructed or undergoing a maintenance activity.

103.11 To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigating actions are in conflict with the California or federal Endangered Species Acts.

103.12 Non-routine or emergency maintenance of flood control or irrigation channels, canals, and water spreading basins.

103.13 To blasting operations that have been permitted by the California Division of Industrial Safety.

103.14 Quarrying and surface mining operations, or to sand and gravel mining, rock crushing, and aggregate and sand processing operations, provided that a permit has been issued by the District in accordance with Rule 501, General Permit Requirements, for such operations.

104 PARTIAL EXEMPTIONS:

104.1 Earth Covering of Paved Roadways: The provisions of Section 304 shall not apply to earth coverings of public paved roadways where such coverings are approved by a government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles.

104.2 Permitted Facilities: The provisions of Section 400, with the exception of Section 405, Reasonable Precautions, shall not apply to any facility permitted by the District in accordance with Rule 501, General Permit Requirements.

104.3 Permitted Facilities With Non-Fugitive Emissions: The provisions of Section 303 shall not apply to any facility having non-fugitive particulate matter emissions that are permitted by the District in accordance with Rule 501, General Permit Requirements.

200 DEFINITIONS: Except as defined below for the purposes of this Rule the terms used are as defined in Rule 102, Definitions.

201 ACTIVE OPERATIONS: Any activity capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, or heavy- and light-duty vehicular movement on disturbed surface areas, including inactive disturbed surface areas, and unpaved roads within a construction or a development project.

202 AGRICULTURAL ACTIVITY: Any activity, operation, facility, or appurtenances thereof, including, but not limited to, the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, viticulture, apiculture, or horticultural, the raising of livestock, fur bearing animals, fish, or poultry, and game birds, and any practices performed by a farmer or on a farm incident to or in conjunction with those farming operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market.

203 ASBESTOS: Asbestiforms of the following minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous ummingtonite--grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.

204 ASBESTOS AIRBORNE TOXIC CONTROL MEASURE FOR CONSTRUCTION, GRADING, QUARRYING, AND SURFACE MINING OPERATIONS: A regulation adopted as Section 93105, Title 17, California Code of Regulations (CCR) by the California Air Resources Board per Health and Safety Code Section 39666 which requires the adoption of regulations to reduce emissions of identified airborne toxics to the lowest level achievable.

205 BOUNDARY LINE: The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession. This may include all or portions of a legal parcel or parcels as defined by the Placer County Assessor.

206 BULK MATERIAL: Any material which can emit dust when stored, disturbed, or handled, and is generally un-packaged, including sand, gravel, soil, aggregate material

less than two inches in length or diameter, and other organic or inorganic particulate matter.

207 **CHEMICAL STABILIZERS:** A non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the Environmental Protection Agency, or any applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

208 **CONSTRUCTION/DEMOLITION ACTIVITIES:** Any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

209 **CONTRACTOR:** Any person or licensed contractor, who has a contractual arrangement to conduct an active operation subject to this Rule for another person.

210 **DISTURBED SURFACE AREA:** A portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emissions of fugitive dust. This definition excludes those areas that have:

210.1 Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

210.2 Been paved or otherwise covered by a permanent structure; or

210.3 Sustained a vegetative ground cover over at least 95 percent of an area for a period of at least 6 months.

211 **DUST SUPPRESSANTS:** Water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

212 **EARTH-MOVING ACTIVITIES:** Include, but are not limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, or soil mulching.

213 **FUGITIVE DUST:** Any solid particulate matter that becomes airborne, without first passing through a stack or duct, directly or indirectly as a result of the activities of man (i.e. anthropogenic), including the raising and/or keeping of animals.

214 **GEOGRAPHIC ULTRAMAFIC ROCK UNIT:** A geographic area that is designated as an ultramafic rock unit or ultrabasic rock unit on maps identified in the California Air Resources Board's Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.

215 **INACTIVE DISTURBED SURFACE AREA:** Any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of seven (7) consecutive days.

216 **NATURALLY-OCCURRING ASBESTOS:** Asbestos that has not been processed in an asbestos mill.

217 **NON-ROUTINE:** Any non-periodic active operation that occurs no more than three (3) times per year, lasts less than 30 cumulative days per year, and is scheduled less than 30 days in advance.

218 **OPEN STORAGE PILE:** Any accumulation of bulk material with five (5) percent or greater silt content which is not fully enclosed, covered or chemically stabilized, and which attains a height of three (3) feet or more and a total surface area of 150 or more square feet. Silt content level is assumed to be five (5) percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the Executive Officer of the California Air Resources Board, that the silt content is less than five (5) percent.

219 **PARTICULATE MATTER:** Any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.

220 **PAVED ROAD:** An improved street, highway, alley, public way, or easement that is covered by typical roadway materials excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are under the jurisdiction of any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

221 **PM10:** Is particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by an applicable reference test method or methods found in Article 2, Subchapter 6, Title 17, California Code of Regulations (commencing with Section 94100).

222 **ROAD CONSTRUCTION AND MAINTENANCE:** Activities undertaken to build roads, highways, railroads, bridges, culverts, drains and other works incidental to road or highway construction, and maintenance activities that involve grading or excavation.

223 **SERPENTINE:** Any form of the following hydrous magnesium silicate minerals: antigorite, lizardite, and chrysotile.

224 **SILT:** Any aggregate material with a particle size less than 74 micrometers in diameter that passes through a No. 200 Sieve.

225 **SIMULTANEOUS SAMPLING:** The operation of two PM10 samplers in such a manner that one sampler is started within five (5) minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.

226 **STABILIZED SURFACE** means:

226.1 Any disturbed surface area or open storage pile that is treated so it will be resistant to wind-driven fugitive dust;

226.2 Any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.

227 **TRACK-OUT/CARRY-OUT:** Any and all bulk materials that adhere to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto a paved road.

228 **ULTRAMAFIC ROCK:** An igneous rock composed of 90 percent or greater of one or a combination of the following iron/magnesium-rich, dark-colored silicate minerals: olivine, pyroxene, or more rarely amphibole. For the purposes of this section, "ultramafic rock" includes the following rock types: dunite, pyroxenite, and peridotite; and their metamorphic derivatives.

229 **UNPAVED ROADS:** Any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by one of the following: concrete, asphaltic concrete, recycled asphalt, or asphalt. Public unpaved roads are any unpaved roadway under the jurisdiction of any federal, state, county, municipal or other governmental or quasi-

governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

230 VISIBLE EMISSIONS: Visible emissions means any particulate matter that is visually detectable without the aid of instruments other than corrective lenses.

231 VISIBLE ROADWAY DUST: Any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions.

232 WIND-DRIVEN FUGITIVE DUST: Visible emissions from any surface area that is generated by wind action alone.

300 STANDARDS

301 VISIBLE EMISSIONS NOT ALLOWED BEYOND BOUNDARY LINE: A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area (including disturbance as a result of the raising and/or keeping of animals or by vehicle use), such that the presence of such dust remains visible in the atmosphere beyond the boundary line of the emission source.

302 VISIBLE EMISSIONS FROM ACTIVE OPERATIONS: In addition to the requirements of Rule 202, Visible Emissions, a person shall not cause or allow fugitive dust generated by active operations, an open storage pile, or a disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart (i.e. 40% opacity), as published by the United States Bureau of Mines.

303 CONCENTRATION LIMIT: A person shall not cause or allow PM10 levels to exceed 50 micrograms per cubic meter, 24 hour average, when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent method for PM10 monitoring. Sampling shall be conducted in accordance with the procedures specified in Section 500.

304 TRACK-OUT ON TO PAVED PUBLIC ROADWAYS: Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed.

304.1 The track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventative measures, and removed within one hour from adjacent streets such material anytime track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations.

304.2 All visible roadway dust tracked-out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every twenty-four (24) hours for continuous operations. Wet sweeping or a HEPA filter equipped vacuum device shall be used for roadway dust removal.

304.3 Any material tracked-out, or carried by erosion, and clean-up water, shall be prevented from entering waterways or storm water inlets as required to comply water quality control requirements.

304.4 Track-out control in geographic ultramafic rock units or in identified naturally-occurring asbestos, serpentine, or ultramafic rock areas, shall comply with the requirements of the California Air Resources Board's Asbestos Airborne Toxic

Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations.

400 ADMINISTRATIVE REQUIREMENTS

401 MINIMUM DUST CONTROL REQUIREMENTS: The following dust mitigation measures are to be initiated at the start and maintained throughout the duration of the construction or grading activity, including any construction or grading for road construction or maintenance.

401.1 Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered. In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is to be disturbed, the cover material shall contain less than 0.25 percent asbestos as determined using the bulk sampling method for asbestos in Section 502.

401.2 The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust exceeding Ringelmann 2 or visible emissions from crossing the project boundary line.

401.3 Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.

401.4 Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.

401.5 Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt, from being released or tracked offsite.

401.6 When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.

401.7 No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either:

401.7.1 Covered with tarps; or

401.7.2 Wetted and loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

401.8 In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, all equipment must be washed down before moving from the property onto a paved public road.

401.9 In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, upon completion of the project disturbed surfaces shall be stabilized using one or more of the following methods:

401.9.1 Establishment of a vegetative cover;

401.9.2 Placement of at least one (1.0) foot of non-asbestos-containing material;

401.9.3 Paving;

401.9.4 Any other measure deemed sufficient to prevent wind speeds of ten (10) miles per hour or greater from causing visible dust emissions.

402 WIND-DRIVEN FUGITIVE DUST CONTROL: A person shall take action(s), such as surface stabilization, establishment of a vegetative cover, or paving, to minimize wind-driven dust from inactive disturbed surface areas.

403 REQUIREMENTS FOR NATURALLY OCCURRING ASBESTOS AREAS: No person shall engage in any road construction or maintenance operations or construction or grading operations where the area to be disturbed is greater than one (1.0) acre without complying with the requirements of the State's Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations where:

403.1 Any portion of the area to be disturbed is located in a geographic ultramafic rock unit; or

403.2 Any portion of the area to be disturbed has naturally-occurring asbestos, serpentine, or ultramafic rock as determined by the person, owner/operator, or the Air Pollution Control Officer (APCO); or

403.3 Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the owner/operator, a registered geologist, or the APCO, in the area to be disturbed after the start of any construction or grading operation.

404 COMPLIANCE WITH STANDARDS: Any person conducting active operations, or who is responsible for the man-made condition of open storage piles, disturbed surface areas (including disturbance as result of the raising and/or keeping of animals or by vehicle use), and inactive disturbed surface areas, shall take the measures necessary to comply with Section 300**.** The property owner, contractors, and any person, that conducts active operations that result in conditions generating fugitive dust is responsible for complying with the provisions of this rule.

405 REASONABLE PRECAUTIONS: The APCO in determining compliance with Section 300 will take into consideration causative factors, the fugitive dust control measures taken to comply with Section 300, the extent that all reasonable fugitive dust control measures are implemented prior to a violation, and the timeliness and extent of corrective actions taken. If both preventative and corrective measures were taken and were reasonable under the circumstances, as determined by the APCO, the APCO may find that enforcement action is not warranted.

500 MONITORING AND RECORDKEEPING

501 MONITORING:

501.1 Sampling to determine compliance with the particulate matter concentration limit of Section 303 is only required when deemed necessary by the APCO.

501.2 The conduct of sampling to demonstrate compliance with Section 303 may be required, with reasonable notice, of the person discharging emissions, or sampling may be conducted by the District with the costs of sampling, not to exceed actual costs, borne by the person discharging emissions.

501.3 Samplers shall be operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent method(s) for PM10.

501.4 Samplers shall be placed upwind and downwind of key activity areas and as close to the boundary line as feasible, such that other sources of fugitive dust between the sampler and the boundary line are minimized.

501.5 Procedures for the conduct of simultaneous sampling to determine compliance with Section 303, and the reporting of results, shall be approved by the APCO.

502 TEST METHODS

502.1 Ultramafic Rock: The ultramafic rock composition of any material shall be determined using standard analysis techniques including, but not limited to, color index assessment, microscopic examination, petrographic analysis or rock thin sections, or chemical analysis techniques, such as X-ray fluorescence spectrometry or inductively coupled plasma analysis.

502.2 Bulk Sampling Methods: ARB Test Method 435, or an alternative asbestos bulk test method approved in writing by the Executive Officer of the California Air Resources Board, shall be used to determine the asbestos content of a bulk sample. For the purposes of determining compliance with this section, references in ARB Test Method 435 to "serpentine aggregate" shall mean “gravel” or other “bulk materials” to be tested for asbestos content.

503 RECORDKEEPING

503.1 Record of Control Implementation: Any contractor engaged in any active operation subject to this rule shall maintain records of actions to stabilize surface areas sufficient to establish location, type and date of treatment. Records shall be maintained and be readily accessible for two (2) years after the date of each entry and shall be provided to the District upon request and shall be open for inspection during unscheduled audits during normal business hours.

503.2 Sampling Recordkeeping Requirements: Any person subject to this rule shall maintain for at least two (2) years all of the following records and such additional records required by the State’s Asbestos Airborne Toxic Control Measure or Construction, Grading, Quarrying, and Surface Mining Operations when this regulation applies. Results of any air sampling or air monitoring conducted at the request of the APCO.

503.3 The results of any asbestos bulk sampling that meets any of the following conditions:

503.3.1 The asbestos bulk sampling was conducted by the owner/operator to document that cover material in geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is to disturbed, contains less than 0.25 percent asbestos.

503.3.2 The asbestos bulk sampling was done at the request of the APCO.