Fugitive PM10 Emission Factors
Level 3 Communications

Disturbed Area - Heavy Construction Emissions

EF = k*1.2 ton PM10/acre-mo (USEPA, AP-42, Section 13.2.3, Subsection 13.2.3.3, page 13.2.3-1, January 1995)

where:

k = PM10 fraction: 0.5 (SCAQMD estimate, see next section)

B) EF = 39.43 lb/acre-day

SLOCAPCD specific

EF = 0.75 ton PM10/acre-month (SLOCAPCD, 1995)

EF = 50.00 lb/acre-day

Wind Erosion - Open Storage Piles

Emission Factor (SCAQMD. CEQA Air Quality Handbook, Table A9-9-E, November 1993, and

EF = k(1.7)(s/1.5)[(365-p)/235](f/15) lb/day/acre

Backhoe I
Vac Truck
Surveying Lt-Heavy
Lt-Heavy Duty Truc
Worker Light Truck

where: s = Silt Content (percent): 7.5 (Overburden soil)
p = Number of days >= 0.01 inches preci 0 (Worst case of no rain during construction)
f = Percent time WS > 12 mph (5.4 m/sec 15 (site specific)
k = PM10 fraction: 0.5 (SCAQMD estimate)

EF = 6.60 lb/acre/day (worst case)

Dirt/Debris Pushing Operations

Emission Factor (SCAQMD Table A9-9-F):

EF = [(0.45)(G^1.5)/(H^1.4)](I) lb/pushing-hour

where: G = Silt Content (percent): 7.5 (Overburden soil)
H = Moisture content of soil (percent): 14
I = Conversion factor kg/hr to lb/hr: 2.2046

EF = 0.51 lb/pushing-hour (soil)

Fugitive PM10 Emission Factors
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Vehicles on Unpaved Roadways

Emission Factor (SCAQMD Table A9-9-D):

EF = 2.1 (G/12) (H/30) [(J/3)^0.7] [(I/4)^0.5] [(365-K)/365] lb/vmt

where G = Silt Loading (%):	4	(gravel road)
H = Mean Vehicle Speed (mph):	15	(average speed)
J = Mean Vehicle Weight (tons):	varies, see table below	
I = Number of Wheels:	varies, see table below	
K = Number of Days > 0.01 in. Precipitat	0	(worst case)

	-		Cement		-	
Parameter	Loaded	Unloaded	Loaded	Unloaded	Loaded	Unloaded
J	34	12	20.9	13.5	98	76
I	18	18	10	10	4	4
EF						
lb/VMT	4.06	1.96	2.15	1.59	4.02	3.36

	Gravel Haul		Lt. Truck/Auto		Med/Heavy Duty Truck	
Parameter	Loaded	Unloaded	Loaded	Unloaded	Loaded	Unloaded
J	40	13	2.5	2	5	4
I	18	18	4	4	6	6
EF						
lb/VMT	4.58	2.07	0.31	0.26	0.61	0.52

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