



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 AIR POLLUTION CONTROL PROGRAM  
**EMISSIONS INVENTORY QUESTIONNAIRE, OR EIQ**  
**FORM 2.7 HAUL ROAD FUGITIVE EMISSIONS WORKSHEET**

FACILITY NAME	FIPS COUNTY NO.	PLANT NO.	YEAR OF DATA
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**INSTRUCTIONS**

This worksheet is **optional**

If the sum of all Vehicle Miles Traveled, or VMT, at the facility is less than 100, this form is not necessary and the emission unit should be marked as insignificant on Form 1.2.

If the haul road parameters are the same as last year and the updated emission factor equation is used (AP-42, Section 13.2.2, *Unpaved Roads*, Nov. 2006), enter the current annual VMT as the throughput on Form 2.0.

Do not calculate a separate emission factor for each vehicle class. Use the weighted average for the entire fleet traveling the haul road to calculate the emission factors.

**1. HAUL ROAD INFORMATION**

EMISSION UNIT NO.	SOURCE CLASSIFICATION CODE (SCC)	SEG. NO.	Type of Dust Control (check one)	Control Efficiency
LENGTH OF ROAD (MILES): IF ONE-WAY, DIVIDE BY 2			<input type="checkbox"/> Paved with Washing	95%
			<input type="checkbox"/> Paved	90%
SILT CONTENT (%) (DEFAULT = 8.3%)			<input type="checkbox"/> Surfactant Spray	90%
			<input type="checkbox"/> Water Spray Documented	90%
DAYS OF RAIN WITH AT LEAST 0.01" PER YEAR (DEFAULT = 105)			<input type="checkbox"/> Water Spray	50%
			<input type="checkbox"/> Other - Specify	
			<input type="checkbox"/> No Controls	0%

**2. HAUL TRUCK INFORMATION**

MAKE/MODEL	UNLOADED TRUCK WEIGHT (TONS) — WEIGHTED AVERAGE FOR FLEET
AVERAGE WEIGHT OF MATERIAL PER LOAD (TONS)	AVERAGE LOADED WEIGHT (TONS) — WEIGHTED AVERAGE FOR FLEET

**3. MATERIAL HAULED**

TYPE OF MATERIALS HAULED	ANNUAL AMOUNT HAULED (TONS)
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**4. CALCULATION OF ANNUAL VEHICLES MILES TRAVELED**

ANNUAL VMT	$\text{Annual VMT} = \frac{2 \times (\text{Length of road}) \times (\text{Annual amount hauled})}{(\text{Average weight of material per load})}$
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**5. CALCULATION OF HAUL ROAD UNCONTROLLED EMISSION FACTOR**

PM <sub>2.5</sub> Emission Factor	$0.15 \times \left( \frac{\text{Silt Content \%}}{12} \right)^{0.9} \times \left( \frac{\text{Unloaded truck weight} + \text{Loaded truck weight (tons)}}{6} \right)^{0.45} \times \left( \frac{365 - \text{Days of Rain}}{365} \right)$	PM <sub>2.5</sub> EMISSION FACTOR
PM <sub>10</sub> Emission Factor	$1.5 \times \left( \frac{\text{Silt Content \%}}{12} \right)^{0.9} \times \left( \frac{\text{Unloaded truck weight} + \text{Loaded truck weight (tons)}}{6} \right)^{0.45} \times \left( \frac{365 - \text{Days of Rain}}{365} \right)$	PM <sub>10</sub> EMISSION FACTOR