

**T13 - TRANSFER POINT, FINES MATERIAL, DRY, ENCLOSED IN A TUNNEL OR CHUTE, AWR / MPI /
DISTRICT 4/9/96**

CALCULATION METHODS

(Fugitive Releases)

$$E_a = U_a \times EF \times (1 - 0.5) \times C_i$$

$$E_h = U_h \times EF \times (1 - 0.5) \times C_i$$

(Ducted Releases)

$$E_a = 0$$

$$E_h = 0$$

Notes:

- The AWR / MPI / District Transfer Point Emission Factors for this material are 0.0014 lbs PM10 and 0.00296 lbs TSP per ton material processed.
- The PM10 factor is based upon the uncontrolled transfer point value in Section 11.19.2, Table 11.19.2-2 of AP-42 (1/95) and the District - AWR - MPI agreement dated 4/9/96.
- The TSP factor is calculated using a (0.74/0.35) ratio of particle size multipliers from Section 13.2.4 of AP-42 and the above PM10 value.
- Emission factors for this calculation procedure are based on the aggregate handling estimation method in Section 13.2.4 of AP-42 (1/95).
- The PM10 Emission Factor is representative of a transfer point with a material moisture content of 2% at a site with an average wind speed of 6 mph.
- The trace metal default concentrations are based on an AWR material analysis for crushed miscellaneous base, (Profile 7), submitted to the District in July 1996. Use site specific data if available.
- Per the 4/9/96 agreement, a fugitive control efficiency of 50% will be assumed for transfer points using Water Spray and Surfactants.
- Material transfer points without water spray equipment and surfactant application (only) should not be evaluated with this procedure.
- Per the AWR / MPI / District agreement;
 "Process" Material = Aggregate Streams composed of material that is 70% or more by weight > #4 mesh.
 "Fines" Material = Aggregate Streams composed of material that is 30+% by weight < #4 mesh.
 "Dry" Material = "Process" streams with an average moisture content of <1.5% and "Fines" streams with an average moisture content of <3.0%.
 "Wet" Material = "Process" streams with an average moisture content of 1.5% or more and "Fines" streams with an average moisture content of 3.0% or more.
 "Zero" emissions will be assumed for water washed aggregates with visible moisture as well as any material with an average moisture content of 5% or more.

POLLUTANT	DISTRICT EMISSION FACTORS (ppmw)	REFERENCE DOCUMENT	ARB	(UNITS)	COMMENTS
NOX					
CO					
SOX					
TOG					
ROG					
TSP	1,000,000.00	AP-42, Sections 11.19.2 and 13.2.4 (1/95).			
PM10	1,000,000.00	AP-42, Sections 11.19.2 and 13.2.4 (1/95).			

POLLUTANT	DISTRICT EMISSION FACTORS (ppmw)	REFERENCE DOCUMENT	ARB	(UNITS)	COMMENTS
ALUMINUM	15,000.00				Based on local test results.
ARSENIC	22.00				Based on local test results.
BARIUM	225.00				Based on local test results.
BERYLLIUM	1.00				Based on local test results.
CADMIUM	1.00				Based on local test results.
CHROMIUM HEXAVALENT	-				Based on local test results. No Cr+6 detected in any samples analyzed.
CHROMIUM NONHEXAVALENT	28.00				Based on local test results.
COBALT	11.00				Based on local test results.
COPPER	37.00				Based on local test results.
LEAD	50.00				Based on local test results.
MANGANESE	530.00				Based on local test results.
MERCURY	-				Based on local test results. No mercury detected in any samples analyzed.
NICKEL	28.00				Based on local test results.
SELENIUM	1.00				Based on local test results.
SILICA, CRYSTALLINE	100,000.00				Based on local test results.
RESPIRABLE SILICA, CRYSTALLINE CRISTOBALITE QUARTZ	7,950.00				PM4 fraction of PM10 silica, assumed to be 7.95%
ZINC	99.00				Based on local test results.