

S15 - SCREENING OPERATION, FINES MATERIAL, DRY, SITE SPECIFIC CONTROLS, AWR / MPI / DISTRICT

4/9/96 METHODOLOGY

CALCULATION METHODS

(Fugitive Releases)

$$E_a = U_a \times EF \times C_i \times (1 - \%capture) \times (1 - \%fugitive\ controls)$$

$$E_h = U_h \times EF \times C_i \times (1 - \%capture) \times (1 - \%fugitive\ controls)$$

(Ducted Releases)

$$E_a = CFM \times 60 \times hrs/yr \times (0.008 / 7000) \times C_i$$

$$E_h = CFM \times 60 \times (0.008 / 7000) \times C_i$$

Notes:

- The AWR / MPI / District Screening Operation Emission Factors for this material are 0.07100 lbs PM10 and 0.15011 lbs TSP per ton material processed.
- The PM10 factor is based upon the uncontrolled Screening 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.
- 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.
- All ducted emissions for this type of control device are assumed to be released at an average rate of 0.008 grains / ft3. No additional capture or control efficiencies should be applied to the ducted release point.
- This procedure may be used for screening operations with unique fugitive dust capture and/or control efficiencies. The fugitive release point capture and control efficiencies will be applied to the emission estimate.
- 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).			
ALUMINUM	15,000.00				Based on local test results.

POLLUTANT	DISTRICT EMISSION FACTORS (ppmw)	REFERENCE DOCUMENT	ARB	(UNITS)	COMMENTS
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.

Last Updated on November 2023, J. Lofgren