C06 - PRIMARY CRUSHING, PRIMARY MATERIAL, OTHER SITE SPECIFIC CONTROLS, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY

CALCULATION METHODS

(Fugitive Releases)
Ea = Ua x EF x Ci x (1 - %capture) x (1 - % fugitive control)
Eh = Uh x EF x Ci x (1 - %capture) x (1 - % fugitive control)
(Ducted Releases)
Ea = CFM x 60 x hrs/yr x (0.008 / 7000) x Ci
Eh = CFM x 60 x (0.008 / 7000) x Ci

Notes:

- The AWR / MPI / District Crushing Operation Emission Factors for this material are 0.00070 lbs PM10 and 0.00148 lbs TSP per ton of material processed.
- The PM10 factor is based upon the uncontrolled total particulate primary crushing 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.
- Ducted emissions are assumed to be released at a particulate rate of 0.008 grains/ft3. No additional capture or control efficiencies for ducted emissions should be applied.
- This emission estimation procedure is applicable to primary crushers with site specific fugitive dust controls. Both the capture efficiency and the fugitive dust control efficiency
are used in the calculation method.
- Per the AWR / MPI / District agreement;
"Primary Material" = Feed streams containing >4 inch material.
"Process" Material = Feed Streams containing material >1/2 inch and <4 inches.
"Fines" Material = Feed streams Exclusively containing material <1/2 inch, or
"Fines" Material = Crushers manufacturing product that is 30% or more 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

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.

Last Updated on November 2023, J. Lofgren