

M08 - METAL DEPOSITION, FLAME SPRAY, HEPA, DEFAULT FACTORS

CALCULATION METHODS

$E_a = U_a \times C_i$ (lbs metal / lb material sprayed) x EF (lbs released/lb metal sprayed)

$E_h = U_h \times C_i$ (lbs metal / lb material sprayed) x EF (lbs released/lb metal sprayed)

NOTES:

- Annual (U_a) and maximum hourly (U_h) throughputs must be individually reported for each material sprayed.
- Emission factors are in units of (lbs individual metal released / lb individual metal sprayed) after controls.
- Site specific emission factors should be used where available.
- Default emission factors have been developed from the limited site specific data collected to date. These values will be updated as additional information is generated.
- Combustion related emissions of NO_x, CO, SO_x, PIC's, etc. are assumed to be negligible as no emissions information currently exists.
- Only very limited data regarding the conversion rate of chromium to hexavalent chromium exists. At this time, source test results are used for Cr+6 in lieu of a more standard approach.

POLLUTANT	District Emission Factor	REFERENCE	TEST	(UNITS)	COMMENTS
	(lbs/lb emissions)	DOCUMENT	LOCATION		
NOX					
CO					
SOX					
TOG					
ROG					
TSP	9.35E-05		Calculated values	lbs/lb material sprayed	Base this estimate on overall usage (lbs of material)
PM10	9.35E-05		Calculated values	lbs/lb material sprayed	Base this estimate on overall usage (lbs of material)
CHROMIUM HEXAVALENT	1.86E-06		Calculated values		
CHROMIUM NONHEXAVALENT	1.52E-04		Calculated values		
NICKEL	3.30E-05		Calculated values		
* OTHER LISTED METALS *	9.35E-05		Calculated values		Assume other metals released at a rate equal to the average of the Ni & Cr (total) values.

Since no test data exists, emissions were calculated as follows;

$(\text{Emissions from Flame Spray with HEPA}) = [(\text{Ave. Emissions from Plasma Spray with HEPA}) / (\text{Ave. Emissions from Plasma Spray with Water Curtain})] \times (\text{Ave. Emissions from Flame Spray with Water Curtain})$