

A03 - ABRASIVE BLASTING, GARNET, UNCONTROLLED

CALCULATION METHODS

Annual Emissions: $E_a = U_a \times EF$ (lbs/ton blast material used)

Hourly Emissions: $E_h = U_h \times EF$ (lbs/ton blast material used)

Notes:

* Control devices, methods, and efficiencies must be identified in EIS database to correctly calculate emissions. Emission factors are "uncontrolled" (before the control device).

* TSP and PM10 factors are based on District engineering estimates (76 through 96).

* Trace metal default emission factors are based on ARB particulate matter speciation profile (#353). Use site and/or equipment specific data if available.

* Trace metal composition of the particulate emissions is assumed to be equivalent to the PM10 fraction of the spent blast material. Base factors on actual blast waste analyses if possible.

POLLUTANT	DISTRICT EMISSION FACTORS (lbs/ton blast material used)	REFERENCE DOCUMENT	ARB	(UNITS)	COMMENTS
NOX					
CO					
SOX					
TOG					
ROG					
TSP	8.0	No EPA abrasive blasting documents found.			Based on District Engineering estimates (permit files).
PM10	8.0	PM10 Factor from AP-42 included in calc method			Assumes all emissions are PM10.
ALUMINUM					
ARSENIC					
BARIUM					
BERYLLIUM					
CADMIUM	3.80E-03		0.05%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
CHROMIUM HEXAVALENT	0.0				Assumes all Chromium compounds are non-hexavalent.
CHROMIUM NONHEXAVALENT	3.84E-02		0.48%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
COBALT					

POLLUTANT	DISTRICT EMISSION FACTORS (lbs/ton blast material used)	REFERENCE DOCUMENT	ARB	(UNITS)	COMMENTS
COPPER	3.44E-03		0.04%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
LEAD	3.44E-03		0.04%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
MANGANESE	3.84E-02		0.480%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
MERCURY					
NICKEL	3.84E-02		0.48%	lbs/lb PM	Based on ARB Particulate Matter Species Profile #353 (8/91)
SELENIUM					
SILICA, CRYSTALLINE	1.28E-01			lbs/lb PM	Assume 1/2 of unspecified compounds = blast medium. Unspecified compounds= 80% of PM10. Crystalline Silica is 4% of blast media. Default unless MSDS is provided
ZINC					

Last Updated on 10/26/2021 By M. Abuelazaim