

X13 - HARD CHROME / ANODIZING ELECTROPLATING, HEPA FILTER CONTROLLED

CALCULATION METHODS

$E_a = U_a \times EF$

$E_h = U_h \times EF$

NOTES:

- U_a = Annual electrical usage, ampere-hour/year
- U_h = Maximum hourly electrical usage, ampere-hour/ hour
- Assume 99% control efficiency for HEPA filter.
- Assume TSP = PM-10.
- C_i = Weight percent of other listed substance in solution, %.
- C Cr+6 = Weight percent of Cr+6 in solution, %.
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- "OTHER" pollutants and their corresponding emission factors are to be manually entered.
- Assume 100% capture efficiency.

POLLUTANT	Emission Factor	REFERENCE	ARB	(UNITS)	COMMENTS
	(lbs/amp-hr)	DOCUMENT	FACTOR		
NOX					
CO					
SOX					
TOG					
ROG					
TSP	3.57E-07	AP-42 (July 1996), Table 12.20-1 = 0.25 grains/amp-hr			
PM10	3.57E-07				
ALUMINUM					
BERYLLIUM					
CADMIUM					
CHLORINE					
CHROMIUM HEXAVALENT	1.43E-07	Average of ARB's Tech. Support Doc. to Proposed ATCM for Emissions of Cr+6 from Chrome Plating & Chromic Acid Anodizing Ops. (Aug. 1989) = 5.2 mg Cr+6/amp-hr (1.146E-5 lbs Cr+6/amp-hr) and AP-42 (July 1996), Table 12.20-1 = 0.12 grains Cr+6/amp-hr (1.715E-5 lbs Cr+6/amp-hr).			
OTHER	1.43E-7 x Ci/C Cr+6				