

X43 - NICKEL 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_{Ni} = Weight percent of nickel in solution, %.
- "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	3.03E-7 x 1/C Ni	Assume that TSP and PM-10 are based on average weight percent of nickel in solution.			
PM10	3.03E-7 x 1/C Ni				
ALUMINUM					
BERYLLIUM					
CADMIUM					
CHLORINE					
NICKEL	3.03E-07	Average of : "EPA's Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxic Compounds and Sources, Oct. 1988" (4.96E-7 lbs Ni/amp-hr), and "AP-42, Table 12.20-4" (9.00E-5 lbs Ni/amp-hr), and "South Coast AQMD's 2003 -2004 New Reporting Procedures for AB2588 Facilities for Reporting their Quadrennial Air Toxics Emissions Inventory, June 2004" (5.10E-7 lbs Ni/amp-hr) times the control efficiency (1.00 - 0.99).			
OTHER	3.03E-7 x Ci/C Ni				