

**X23 - CADMIUM 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, %.
- $C_{Cr+6}$  = Weight percent of Cr+6 in solution, %.
- "OTHER" pollutants and their corresponding emission factors are to be manually entered.
- Assume 100% capture efficiency.

<b>POLLUTANT</b>	<b>Emission Factor</b>	<b>REFERENCE</b>	<b>ARB</b>	<b>(UNITS)</b>	<b>COMMENTS</b>
	<b>(lbs/amp-hr)</b>	<b>DOCUMENT</b>	<b>FACTOR</b>		
NOX					
CO					
SOX					
TOG					
ROG					
TSP	1.10E-9 x 1/C Cd	Assume TSP and PM-10 emissions are based on the average weight percent of cadmium in solution.			
PM10	1.10E-9 x 1/C Cd				
ALUMINUM					
ARSENIC					
BARIUM					
BERYLLIUM					
CADMIUM	1.10E-09	EPA's Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxic Compounds and Sources (Oct. 1988) = 5 E-5 g Cd/amp-hr.			
OTHER	1.10E-9 x Ci/C Cd				