

**X50 - COPPER ELECTROPLATING, UNCONTROLLED**

**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 TSP = PM-10.

-  $C_i$  = Weight percent of other listed substance in solution, %.

-  $C_{Cu}$  = Weight percent of copper in solution, %.

- "OTHER" pollutants and their corresponding emission factors are to be manually entered.

<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	4.53E-5 x 1/C Cu	Assume that TSP and PM-10 are based on average weight percent of copper in solution.			
PM10	4.53E-5 x 1/C Cu				
ALUMINUM					
ARSENIC					
BARIUM					
BERYLLIUM					
CADMIUM					
CHLORINE					
COPPER	4.53E-05	Assume emission factor is the same as nickel electroplating.			
OTHER	4.53E-5 x Ci/C Cu				