

**X60 - COPPER CYANIDE 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, %.

-  $C_{CN}$  = Weight percent of cyanide in solution, %.

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

POLLUTANT	Emission Factor	REFERENCE	ARB	(UNITS)	COMMENTS
	(lbs/amp-hr)	DOCUMENT	FACTOR		
NOX					
CO					
SOX					
TOG					
ROG					
TSP	8.58E-08	Default TSP/PM-10 EF = CN + Cu EF's = 8.58E-8 lbs/amp-hr.			
PM10	8.58E-08	Assume that TSP and PM-10 are based on average weight percent of cyanide in solution.			
ALUMINUM					
ARSENIC					
BARIUM					
BERYLLIUM					
CADMIUM					
CHLORINE					
CYANIDE	3.86E-08	AP-42 (July 1996), Table 12.20-4 = 2.7E-6 grains CN/dscf -> 2.7E-4 grains CN/amp-hr.			
COPPER	4.72E-08	Copper EF determined using CN EF and ratio of Cu in $Cu(CN)_2 = 3.86E-8 \times [63.5/(26)(2)]$			
OTHER	$3.86E-8 \times C_i/C_{CN}$				