X41 - NICKEL ELECTROPLATING, WET SCRUBBER CONTROLLED

CALCULATION METHODS

Ea = Ua x EF

Eh = Uh x EF

NOTES:

- Ua = Annual electrical usage, ampere-hour/year

- Uh = Maximum hourly electrical usage, ampere-hour/ hour

- Assume 75% control efficency for wet scrubber. See ARB Tech. Support Doc. to Proposed ATCM for Emissions of Cr+6 from Chrome Plating & Chromic Acid Anodizing Operations (Jan. 1988), Table III-2 and

ARB Tech. Guidance Doc. to the Criteria & Guidelines Reg. for AB2588 (Aug. 1989), page 44.

- Assume TSP = PM-10.

- Ci = 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	4.49E-6 x 1/C Ni	Assume that TSP and PM-10 are based on average weight percent of nickel in solution.			
PM10	4.49E-6 x 1/C Ni				
NICKEL	4.49E-6	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, Oct. 2021" (5.29E-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 (1.00-0.75).			
OTHER	4.49E-6 x Ci/C Ni				

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