

## Notes on "Requirements"

This four page hand written document is not signed nor does it contain any kind of indentifying information as to when it was prepared or who prepared it except that it was prepared prior to 1/1/90 which is the earliest date referred to in it. This document was found tucked inside "Industrial Ventilation A Manual of Recommended Practice 15<sup>th</sup> Edition". This book is marked multiple times with the name Mike Noble and so while it is not possible to know who prepared this document it is possible to know that Mr. Noble knew of its contents.

# ~ REQUIREMENTS ~

## — ELECTROPLATING — HEX. CHROMIUM EMISSIONS (E)

▷ WITHIN 60 DAYS of 1/1/90 :  $E \leq 2 \text{ lb/yr}$   
Control req't : final control level of  $0.15 \text{ mg/Amp-hr}$

▷ WITHIN 60 days of 7/1/92 :  
for  $2 \text{ lb/yr} < E \leq 10 \text{ lb/yr}$   
final control level :  $0.03 \text{ mg/Amp-hr}$

▷ FOR EMISSIONS  $> 10 \text{ lb/yr}$   
final control level :  $0.006 \text{ mg/Amp-hr}$   
within 60 days of 7/1/92

# RECOMMENDED OPERATING CONDITIONS <sup>①</sup>

FOR WITHIN 2 lbs/hr EMISSIONS

MINS CAN OPERATE THE HARD CHROME PLATING BATHS AT 4400 amps total

&  
THE ACID ANODIZING / DECORATIVE CHROMING OPERATION at 5 amps / 600 amps respectively

FOR 4,000 HRS / YR

OR 250 days @ 16 HRS / DAY

1. DO NOT EXCEED :

4400 amps for HARD CHROME PLATING BATHS JQP & JFC COMBINED

605 amps for Decorative chrome plating bath AND CHROMIC ACID ANODIZING BATH COMBINED.

# RECOMMENDATIONS - CONT'D -

(2)

2. DO NOT EXCEED :

139°F	for	Bath	JQP
148°F	"	"	JFC
119°F	for	decorative chrome bath	
90°F	for	acid anodizing bath	

3. EXHAUST FLOW FROM THE SCRUBBERS SHOULD NOT EXCEED : 18,211 DSCF/MIN FROM BATHS JQP & JFC AND 10,577 DSCF/MIN from the decorative / acid anodizing baths

4. NO PLATING SHOULD OCCUR UNLESS AT LEAST 100 GAL/MIN OF SCRUBBER WATER IS MAINTAINED THROUGH EACH SCRUBBER .

5. SCRUBBER WATER SHOULD NOT CONTAIN MORE THAN 2 PPM OF DISSOLVED CHROMIUM . A MINIMUM OF 8,640 GALS/DAY OF BLOW DOWN WATER SHOULD BE REMOVED FROM THE SYSTEM (6 gals/min) WHILE PLATING OPERATIONS IN PROGRESS .

# RECOMMENDATIONS - CONT'D -

(3)

6. STACK HEIGHT MEETS THE 10 METER MINIMUM HEIGHT ABOVE GROUND - PURSUANT TO SECTION 330 OF REG. 11 RULE 8 -

HOWEVER GEP (Good engineering practice) requires at least 1.5 times the height of <sup>the</sup> adjacent building.

THE MINS STACKS ARE BOTH below the height of the adjacent building -

IT IS recommended that the height of both stacks be increased to at least 65 ft. before the facility begins operations again -