

## Chrome Shop Air Sampling Results

System: Hexavalent Hard Chrome Plating (20,000 DCA total) (2- plating and 1-reverse etch tank)

OSHA Permissible Exposure Limit - PEL (tested 8/4/2021)

<u>Employee Breathing Air</u>	<u>ug/cm<sup>3</sup></u> <u>PEL</u>	<u>Times Below</u> <u>the PEL</u>	
OSHA Cr Regulation:	5.0		
Employee #1 (worked in shop):	< 0.032	> 156.25	
Employee #2 (worked tank side):	0.090	55.56	
<u>Following Dust Wipes:</u>			
Plating Shop Desk:	0.0056	892.86	
Electrical Control Center:	0.0340	147.06	(located in front of plating tanks)
Chrome Tank Hood:	0.0040	1,250.00	
Plating Shop Floor:	0.0270	185.19	

## EPA Stack Tests

The EPA chrome stack test was conducted on 6/17/2021 by an approved environmental laboratory.

**System Design:** Used a mech pad built into the exhaust hoods and a mist eliminator having two mesh pads and a HEPA filter. The plating baths were designed for an 8" solution level and 30 oz/gal. of High-Efficiency Dura-3000 chemistry.

**Test Results:** No hexavalent chrome was present in the air discharged to the atmosphere. This relates to a reading of Zero, or at least below detectable limits.

### Notes

PEL is OSHA's Permissible Exposure Limit, an 8-hour time-weighted test for hex. Cr. Exceeding this requires the employee to wear approved respirators. OSHA's action level (AL) is 2.5 ug/cm<sup>3</sup> which requires the employee to be re-sampled every 6 months along with medical surveillance. Ug/cm<sup>2</sup> is micrograms (millionth of a gram) per cubic meter of air breathed by the employee.