

CORTLAND, NE, April 19, 2010 /**24-7PressRelease**/ -- OSHA has published detailed compliance requirements for lowering Hexavalent Chromium exposure, also known as Hexavalent Chrome, Chromium 6, Chromium VI, and Cr(VI). It is important to note that the deadline for implementing engineering controls is **May 31, 2010**. [1910.1026 Chromium \(VI\)\\*](#). In measurable terms the new standard for **PEL** or **Permissible Exposure Limit** has been established as: an 8-hour time-weighted average exposure limit of 5 micrograms of Cr(VI) per cubic meter of air ( $5 \mu\text{g}/\text{m}^3$ ). In other words, the average exposure to Cr(VI) cannot exceed ( $5 \mu\text{g}/\text{m}^3$ ) over the course of an 8 hour work shift over a 40-hour workweek.

What does it all mean? The new standards apply to all occupational exposures to Cr(VI) with very limited exceptions. Although OSHA has established separate standards for Chromium 6 exposure for the sectors of general industry, construction and shipyards most of the requirements are the same. OSHA has legislated the lowering of Chromium VI exposure limits based on findings that workers exposed to Cr(VI) suffer increased risk of serious health effects. It has now been well documented by the EPA that Hexavalent Chromium is an IARC-1 human carcinogen. Cr(VI) is present in many types of compounds used in a variety of industrial and commercial applications. In the "hot work" of the welding process some materials such as stainless steel change chemically. In this example the chromium is not originally hexavalent but is converted by the high temperatures involved so it is important to know your materials as well as your processes.

Industrial Maid is a premier industrial air filtration equipment manufacturer specializing in removing welding smoke and fumes. A direct-read air monitoring assessment and published report of Industrial Maid's [RH60-4](#) Series Welding Fume Extractor was approved by Stephen D. Paul, MPH, CIH, Corporate Safety and Health Officer of an occupational health consulting firm and Adjunct Instructor in the Occupational and Environmental Health program at Wayne State University.

Tests measured total airborne particulate concentrations ranging from 0.21 to 3.5  $\text{mg}/\text{m}^3$  with the RH60-4 operating compared to same-day tests indicating a 0.38 to 11.4  $\text{mg}/\text{m}^3$  range of concentration without the RH60-4 operating.

In the simplest of terms our air filtration systems efficiently source capture toxic fumes and gases and remove them so that they never enter the welder's breathing space. Also of utmost importance to note when striving for the new lower PEL standard, our **RH & RHV Series** Hoods, **EB 56 Series** Side Drafts, and **T-Series** models can be fitted with final Hepa's filters. Engineers with 30+ of knowledge and experience are on hand to help determine the best equipment for changing an air quality challenge into an OSHA compliant solution. For more information contact us at 877-624-3247.