Guidance for Complying with the United States Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants (NESHAPs) – Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

On September 19, 2012, the United States Environmental Protection Agency (U.S. EPA) published final amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) – Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. As part of those amendments, U.S. EPA phased out the use of perfluorinated octane sulfonate (PFOS) in fume suppressants for use in chrome plating operations. PFOS is of concern because these compounds have persistent, bioaccumulative, and toxic properties as shown in fish and in water.

Facilities in California are subject to California’s Hexavalent Chromium Airborne Toxic Control Measure for Chrome Plating and Chromic Acid Anodizing Operations (Chrome ATCM). The Chrome ATCM requires many of these facilities to use a certified fume suppressant to meet hexavalent chrome emission limits. In addition, facilities within the South Coast Air Quality Management District (SCAQMD) are subject to Rule 1469, which requires facilities use certified fume suppressants. The California Air Resources Board (ARB) and SCAQMD maintain a list of these certified fume suppressants which have undergone testing to meet hexavalent chromium emission standards. Currently, ARB has certified three non-PFOS fume suppressants for use in chrome plating operations, and is continuing to work with non-PFOS manufacturers to test additional products for certification.

When does the ban on PFOS-based fume suppressants begin?

Effective September 21, 2015, the NESHAP bans PFOS-based fume suppressants for use in chrome plating operations. However, ARB granted facilities a one year extension from this ban to allow for the time needed to certify new non-PFOS fume suppressants. Once this extension ends on September 21, 2016, the owner or operator of a hard chrome plating, decorative chrome plating, or chromic acid anodizing tank, including enclosed tanks and trivalent chromium tanks, may not add PFOS-based fume suppressants to any electroplating tank. For more information on ARB’s one year extension, please see the chrome plating fact sheet at:
http://www.arb.ca.gov/toxics/chrome/fumesuppressantfactsheet.pdf
What type of fume suppressant can I use?

Facilities that are required to use a certified fume suppressant can use any certified fume suppressant and must meet the respective surface tension limits. The list of certified fume suppressants and surface tension limits can be found at: http://www.arb.ca.gov/toxics/chrome/fumesuppresslist0416.pdf. This list will be updated as additional non-PFOS fume suppressants become certified.

How can I get more information?

Information on California’s Chrome Plating ATCM and additional information on fume suppressants can be found on ARB’s website at: http://www.arb.ca.gov/toxics/chrome/chrome.htm.

If you have questions regarding chrome plating operations outside of the SCAQMD, please contact Michelle Komlenic, Air Pollution Specialist (916) 322-3926 or via email at michelle.komlenic@arb.ca.gov. Facilities located within the SCAQMD should contact Mitch Haimov, Senior Engineering Manager (909) 396-3129 or via email at mhaimov@aqmd.gov.

Facility specific or permitting questions should be directed to your local air district, which can be found at the following website: http://www.arb.ca.gov/capcoa/roster.htm