Area Source NESHAP for Plating and Polishing – subpart 6W
Rule clarifications compiled by SBEAPs from multiple email responses from Dr. Donna Lee Jones, USEPA rule writer.

Q1: I received a call from a metal finisher that uses a zinc phosphate pretreatment step prior to the use of an organic sealer then an immersion coating process. The phosphate solution includes the following ingredients: zinc dihydrogen phosphate, nickel dihydrogen phosphate, and manganese dihydrogen phosphate. The concentrations of the nickel and zinc compounds, as supplied, exceed those listed in the area source definition of 'plating and polishing metal HAP.' The as applied concentration falls below those levels.

A: I'M ASSUMING THAT "AS APPLIED" REFERS TO THE TANK BATH. YES, THE REQUIREMENT ONLY APPLIES TO THE MIXTURE IN THE TANK BATH AND NOT THE RAW MATERIALS. THE REQUIREMENTS ARE ONLY MANAGEMENT PRACTICES THAT WOULD ALSO BE REQUIRED FOR THE IMMERSION COATING TANKS.

Q2: Would the zinc phosphate pretreatment step be subject to this area source regulation? If so, this regulation may affect a certain number of businesses that use a pretreatment step such as this prior to the application of an organic coating.

A: YES, THE RULE WOULD APPLY SINCE IT APPEARS TO BE A TYPE OF METAL COATING PROCESS.

Q3: How is applicability affected by materials 'as supplied' and 'as applied' with respect to the definition of 'plating and polishing metal HAP'?

A: THE RULE ONLY REFERS TO THE FINAL MIXTURE, AS APPLIED. “AS SUPPLIED” ONLY IS RELEVANT TO MATERIALS THAT ARE USED FULL STRENGTH.

Q3a: [Clarifying the response to Q3] You state that the plating HAP concentration that's affected is based on the "as applied" value or the concentration as it is used in the tank. Yet the only language I could find to determine whether a material is affected are these two which specify MSDS values:

> 63.11505(a)(6): Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.
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> definition *plating and polishing metal HAP*: material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Is there other language that more specifically identifies the bath concentration?

A: NO, THE PURPOSE OF ALLOWING THE MSDS WAS SO THAT PEOPLE DID NOT HAVE TO DO THEIR OWN TESTING. THE REGULATED ENTITY IS THE PLATING AND POLISHING TANK, SO THAT IS THE ONLY CONNECTION TO THE LIMIT ON THE "PLATING MATERIAL." WE MAY DO A REVISION OF THE RULE TO CORRECT THIS AND OTHER CLARIFICATIONSIF WE CANNOT GET IT PROMULGATED WE WILL PUT IT UP AS GUIDANCE ON THE EPA AREA SOURCE WEBSITE.

Q4: The caller needs to know whether an initial notification needs to be submitted to EPA by tomorrow or not.

A: TO THE STATE AGENCY OR REGION. IF THEY DON'T KNOW, BETTER TO SEND IT TO BOTH PLACES AND USE THE REVISED FORM ATTACHED HERE. THE REGIONAL OFFICES ARE LISTED IN THE BROCHURE ALSO ATTACHED HERE.

Q5: I am currently working with a zinc plater who engages in Chrome Conversion Coating. When looking at the MSDS, it appears that the chemicals used do contain chromium is excess of 1% but they are trivalent chromium. My question is related to the intent of the 6W. Was the intent of 6W to include all chromium (Hexavalent and trivalent)? The plater I am working with uses Chromium III Complexes and no hexavalent. Does 6W apply in this instance?

A: YES, IT STILL APPLIES TO CHROME 3. THERE WAS A COMMENT ON THIS ISSUE THAT WE ANSWERED IN THE PREAMBLE TO THE FINAL RULE. […] BASICALLY, THE NAME OF THE HAP IN THE CLEAN AIR ACT IS "CHROMIUM COMPOUNDS" AND THE CLEAN AIR ACT DOES NOT DIFFERENTIATE AMONG THE TYPES OF COMPOUNDS.

Q6: If I conduct the activities that are covered by the plating and polishing rule but am a major source of HAPs, I am no longer an area source and am not subject to the rule. Is that a correct interpretation? It would seem that even if I am an area source in terms of the plating and polishing component of my operation but my facility is a major source of HAPs for other reasons (degreasing, for example), then I would not be an "affected" source for this rule. Correct?

A: CORRECT. THE MAJOR/AREA DESIGNATION IS BY FACILITY AND NOT A SPECIFIC PROCESS.

Q7: Initial Notifications would only be required for affected sources. Is the EPA encouraging facilities that may appear to be affected to also send in an Initial Notification stating that they are not an affected source?

A: NO, DO NOT SEND THE FORM IF YOU ARE NOT AN AFFECTED SOURCE. THE ONLY CASE WOULD BE IF THE STATE SENT YOU A NOTICE AND THEY THINK YOU ARE AN AFFECTED SOURCE; THEN IT WOULD BE GOOD TO GET "OFF THEIR LIST."

Q8: If an affected source has an electrolytic process tank, and captures and exhausts the emissions, must they keep the records requires for WA/FS if they also use that in the process? The intent would be to specify the capture and control as the compliance method in the Initial Notification.

A: NO, JUST PICK ONE METHOD THAT'S THE EASIEST FOR YOU TO DOCUMENT.

Q9: Similar to item Q8 above, if for some reason the affected source need to switch its compliance method from capture and control to WA/FS, could the affected source simply ensure that they were meeting the recordkeeping requirements for WA/FS during the time it intended to use WA/FS for compliance purposes?

A: YES, A FACILITY NEEDS TO DO THE RECORDKEEPING FOR WHATEVER METHOD IS USED FOR COMPLIANCE. YOU SHOULD INDICATE ON YOUR INITIAL NOTIFICATION FORM AND YOUR NOTIFICATION OF COMPLIANCE STATUS FORM (DUE JULY 1, 2010) THAT YOU WILL OR MAY BE USING DIFFERENT METHODS OF COMPLIANCE AT TIMES FOR ONE OF MORE TANKS/PROCESSES.

Q10: It appears that non-electrolytic processes that use a compound of one or more of the plating and polishing metal HAPs are subject to Subpart 6W. Such processes might be referred to as electroless, conversion coating, and sealing as I understand now from viewing the regulation. Would such facilities need to submit an initial notification and comply with control options under the category of either electroplating that uses cyanide or that which does not?

A: NO, THERE ARE SEPARATE REQUIREMENTS FOR ELECTROLESS PLATING UNDER THE RULE, WHICH ARE BASCIALLY JUST MANAGEMENT PRACTICES.

Q11: An individual believes that the applicability of Subpart 6W to conversion coating might be eliminated sometime in the future prior to the compliance date.

A: NOTHING IS PLANNED OR SHOULD BE EXPECTED.

Q12: How does Subpart 6W apply to a process line where a non electrolytic tank that uses a form of Cd, Cr, Pb, Mn or Ni as a bath ingredient which follow or proceed an electrolytic process that does not utilize Cd, Cr, Pb, Mn or Ni? In this case, the company uses a Nickel compound sealant in a non-electrolytic process tank that follows a sulfuric acid anodizing tank.

A: ONLY THE TANK WITH THE METAL HAP IS THE AFFECTED TANK. SINCE THE REQUIREMENTS ARE JUST WORK PRACTICES, THE FACILITY WILL FIND THAT THEY WILL LIKELY ALSO PERFORM THESE GOOD HOUSEKEEPING PRACTICES FOR THE ENTIRE LINE ANYWAY SINCE IT IS MORE PRACTICAL THAT WAY (BUT NOT REQUIRED). MOST IF NOT ALL OF THE PRACTICES ARE THINGS THAT MOST FACILITIES ARE ALREADY DOING.

Q13: Does this rule apply to the use of a portable device used to repair hydraulic cylinders (nick, gouge or scratch on the chromium surface)? The device utilizes a current and a wand applicator. An active ingredient is ‘Cadmium Coatalyte No. 312’ which contains about ten percent by weight of Cadmium.

A: NO, THIS PROCESS IS NOT AFFECTED BY 6W. THE RULE 6W ONLY APPLIES TO TANK-BASED ELECTROPLATING. ALSO, REPAIR PROCESSES ARE EXEMPT.

Q14: The 'Applicability' section of the 'Summary of Final Rule' published on July 1, 2008 which states "The final rule does not apply to the following sources: Process units that are subject to the Chromium Electroplating NESHAP,. . . ." was taken to mean that owning or operating equipment subject to the Chromium Electroplating NESHAP exempts the 'source' from this area source rule. I thought it merely exempted the part of the source subject to the Chromium Electroplating NESHAP. Given the wording used, I am wondering if I am mistaken on my understanding.

A: THE EXEMPTION FOR SUBPART N IS ONLY FOR THE PROCESS OR EMISSION SOURCE, AS STATED, AND NOT THE ENTIRE FACILITY. THE USE OF THE TERMS ‘SOURCE’ AND ‘FACILITY’ ARE SOMETIMES USED INTERCHANGEABLY IN EPA RULES. IN THE CASE OF SUBPARTS N AND 6W, THE “SOURCE” IS THE TANK. NOTE THAT THE MAJOR VS AREA DISTINCTION STILL NEEDS TO BE DEFINED BASED ON THE ENTIRE FACILITY.

Q15: If a source is utilizing 'dry mechanical polishing equipment' to improve the appearance of a part with a Cadmium, Chromium, Lead, Nickel, and/or Manganese surface, is the equipment subject due to the potential for emitting the 'plating and polishing metal HAP' or based on the concentration of the metal in the substrate being polished or some other criteria?

A: §63.11480(d)(5)," WHAT PARTS OF MY PLANT DOES THIS SUBPART COVER?." DRY MECHANICAL POLISHING CONDUCTED TO RESTORE THE ORIGINAL FINISH TO A SURFACE IS EXEMPT. HOWEVER, IF POLISHING IS DONE AFTER PLATING THEN IT IS APPLICABLE TO THE RULE BASED ON THE CONCENTRATION OF THE METAL IN THE SUBSTRATE BEING POLISHED. IF THE POLISHING IS DONE TO THE SURFACE LAYER OF THE PART AND THE SURFACE LAYER IS 100% METAL HAP, THEN THE RULE WOULD ALSO BE APPLICABLE.