

Aerospace Manufacturing and Rework Facilities MACT

Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your State or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in the NESHAP.

3/5/99

Questions from STAPPA/ALPCO to OAQPS regarding the Aerospace NESHAP.

Question 1 - Chemical Milling Maskants

The chemical milling maskant limits are defined by the type of etchant used in chemical milling. According to discussion with industry representatives the of etchant does not necessarily dictate the VOC/HAP content the maskants used.

The NESHAP defines chemical milling maskants application operation as the application of chemical milling maskant for use in type I or Type II chemical etchants. The NESHAP defines type II etchant as a chemical milling etchant that is a strong sodium hydroxide solution containing amines (Type I etchants contain varying amounts of dissolved sulfur and do not contain amines).

Maskants that can be used with both type I and type II etchants could be considered type I chemical milling maskants and subject to the higher HAP or VOC content of 622 g/L. This will reduce the number of chemical milling maskants subject to the lower limit, 160 g/L for type II chemical milling maskants and creates difficulty in determine compliance with the chemical milling maskant limits.

Answer: The terms maskants were negotiated during roundtable discussions with States/locals and industry during rule development. In accordance with 63.742, maskants that must be used with a combination of Type I and Type II etchants are not covered by 63.747.

Question 2 - VOC and HAPs as carcinogens and noncarcinogens

Exemption of primer, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC less than 0.1% for nancarcinogens.

U. S. EPA should define which HAP and VOC are carcinogens. The Aerospace NESHAP allows the use of manufacturer's supplied data or Method 24 to determine HAP and VOC content. [63.750(c)(1)] This requirement does not define what HAPs or VOCs are carcinogens. The OSHA hazardous substance MSDS information does not address all HAPs or VOCs

Answer: Subpart GG allows MSDSs to be used for gathering HAP and VOC data. The intent of restricting to HAP and VOC to 1% for noncarcinogens and 0.1% for carcinogens was to maintain the requirement for identifying constituent data on MSDSs as required by OSHA. In accordance with 29 CFR 1910.1200(g), OSHA requires that manufacturers are required to report all of the following information on MSDSs:

- For single chemicals, the chemical name and common name(s)
- For a mixture, tested as a whole to determine hazard: chemical and common name(s) of ingredients contributing to hazard and common name(s) of mixture itself
- For a mixture but not tested as a whole:
 - chemical and common name(s) of all ingredients which have been determined to be health hazards and which are $\geq 1\%$ or $\geq 0.1\%$ if carcinogenic
 - additional ingredients if evidence that release would exceed PELs or TLVs
 - all ingredients which present a physical hazard when present in the mixture

Therefore, the MSDS should cover all VOC and HAPs as identified in Section 112 of the Clean Air Act (CAA).

Question 3 - Dedicated solvent recovery devices

There is no definition in the rule for the term "Dedicated solvent recovery device" although Part (g)(1) of Section 63.750 refers to the use of such a device when using a material balance calculation to show compliance when a control device is used to reduce HAP or VOC emissions by 81% or better.

Answer: The dedicated solvent recovery device under 63.750(g)(1) is the carbon adsorber used to comply with 63.745(d) - controlled coatings, 63.746(c) - organic HAP containing strippers, or 63.747(d) - controlled maskants.

Question 4 - Rolling averages

There appears to be a conflict with the requirements of 63.753 (c)(iv)(A), which concerns various reporting requirements, and 63.750 (g)(1) of the Text methods and procedures.

63.753 (c)(iv)(A) requires for carbon absorbers, an indication of each rolling

period when the overall control efficiency of the control system is calculated to be less than 81%, plus the initial material balance calculation, and any calculated exceedances. We believe a rolling period is only necessary for a mass balance calculation to determine control efficiency and is not needed when the capture and control efficiencies of the adsorber are used to determine control efficiency (the latter as determined by a source test and the appropriate methodology for determining capture efficiency).

63.750 (g)(l) requires a material balance to be accomplished over a rolling 7-to 30-day period. Other parts of 63.750 (g), specifically (2) through (6), and only require that the capture and control efficiency of the carbon adsorber be equal or greater than 81%, with no material balance or any rolling period involved. Thus 63.750 (g) supports the idea that a rolling period is only necessary for a mass balance calculation.

Answer: 63.750(g)(1) allows the user of a dedicated solvent recovery device to either perform a liquid-liquid HAP or VOC material balance over rolling 7- to 30-day periods, or to conduct a test to determine the control efficiency of the unit (described under (g)(2)-(g)(4)). If the source picks the rolling average (g)(1) then they need to provide material balance calculations. If they pick the other they have to show the control efficiencies are greater than 81%. The reporting requirement under 63.753(c)(iv) requires all the information from both type of tests.

There should probably be an "or" in there. From the description, the material balance calculation only goes with (g)(1) and not the other parts. Instead of saying "the initial material balance calculation" in (c)(iv), we could probably say any calculations, because all of the parts require some type of calculation. We will investigate further the need to change this requirement.