Determination of Trace Air Emissions for Standard No. 8

Many chemical mixtures used in the manufacturing process may contain trace amounts of hazardous chemicals which are not required to be listed on a Safety Data Sheet (SDS). The trace chemicals themselves as well as levels present may also vary from shipment to shipment for many of the chemical mixtures used in the process. This makes it very difficult to determine trace air emissions. In some cases an SDS may list these trace chemicals as being present at levels of <1% of the mixture. The < implies the exact concentration in the mixture is unknown and possibly could be present at a concentration of zero to .9%. Unless the Department determines otherwise, if toxicity category I (i.e. low toxicity) air pollutants are listed on the SDS at <1% (or tested to be <1%), then the toxic pollutant can be considered as a true trace emission and need not be reported as an air emission. Otherwise, the following guidance should be used to determine what trace emissions should be included in emission estimates for an air emission point:

(1) If the toxic chemical is classified as a OSHA carcinogen and is less than 0.1% of the air emissions by weight (excluding the weight of dilution components such as air, water vapor, oxygen, nitrogen, and carbon dioxide) then it can be considered a true trace emission and need not be reported as an air emission.

(2) If the toxic chemical is not classified as an OSHA carcinogen and is less than 1% of the air emissions by weight (excluding the weight of dilution components such as air, water vapor, oxygen, nitrogen, and carbon dioxide) then it can be considered a true trace emission and need not be reported as an air emission.

(3) If reasonable process knowledge should indicate the presence of intermediate reaction products, then the guidance in No. 1 & 2 above should be used to determine if these emission(s) can be considered true trace emission(s) and need not be reported as air emission(s).

These are the same de minimis levels used by EPA 745-K-94-001, *Toxic Chemical Release Inventory Reporting Form R and Instructions, Section 313 of the Community Planning and Community Right-to-Know Act* concerning the determination of notifications to include on the SDS. The list of OSHA carcinogens can be found in Table II of the same document. These are noted by a 0.1% entry in the de minimis concentration column of this table.

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