7019.3065 MERCURY MATERIAL BALANCE.

If the methods in parts 7019.3040 and 7019.3050 are unavailable to an emission reporting facility, the owner or operator of a mercury emission source may calculate mercury air emissions using the material balance method described in this part. This method may be used in conjunction with or instead of emission factors and enforceable limitations methods described in parts 7019.3080 and 7019.3090, where applicable. A person using material balance to calculate mercury emissions must determine the total mercury air emissions (E) as follows:

$$E = (A - B - C) * (1 - CE)$$

Where:

A = the total amount of mercury entering the process. The amount of mercury used in this calculation must be the amount certified by the supplier, the maximum amount stated on a material safety data sheet, or the maximum amount determined by sample analysis using a reference method.

B = the sum of the amount of mercury incorporated into manufactured products. The owner or operator must submit an explanation of how this quantity was determined.

C = the sum of the amount of mercury leaving the process by a mechanism other than through controlled stack gases or in a product, as when material leaves the process as a waste, is recycled, or is approved for beneficial reuse. The mercury leaving the process by such a mechanism must be established by sample analysis using a reference method. If the actual mercury content of the mercury leaving the process is unknown, then C = 0.

CE = the overall efficiency, or the product of capture efficiency and control efficiency, of any air pollution control device used to capture or control mercury air emissions, expressed as a decimal fraction of 1.00. The overall efficiency must be based on efficiency factors, as defined in part 7005.0100, subpart 9b, or must be based on the overall efficiency verified by a performance test conducted according to parts 7017.2001 to 7017.2060.

Statutory Authority: MS s 116.07

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