

**7019.3060 VOLATILE ORGANIC COMPOUND (VOC) AND AIR TOXICS MATERIAL BALANCE.**

If the methods in part 7019.3040 or 7019.3050 are unavailable to the owner or operator of an emission reporting facility or a facility issued an option B registration permit under part 7007.1120 that chooses to be assessed a fee under part 7002.0025, subpart 1, item C, subitem (1), the facility may calculate VOC and air toxics 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 VOC and air toxics emissions must determine the total VOC emissions and air toxics emissions (E) as follows:

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

where:

A = the amount of VOC and air toxics entering the process. The amount of VOC used in this calculation must be the amount certified by the supplier, the maximum amount stated on the material safety data sheet, or the amount determined by reference method 24. The amount of air toxic used in the calculation must be the amount certified by the supplier or the maximum amount stated on the safety data sheet, unless an amount has been previously determined by an approved reference methodology.

B = the amount of VOC and air toxics incorporated into the product. This includes VOCs chemically transformed in production. An explanation of this calculation must also be submitted.

C = the amount of VOC and air toxics, if any, leaving the process as waste, or otherwise not incorporated into the product and not emitted to the air. If the actual VOC and air toxics content of the waste is unknown, then C = 0.

CE = the control efficiency, or the product of capture efficiency and collection or destruction efficiency, of any device used to capture and/or control VOC and air toxics emissions, expressed as a decimal fraction of 1.00. The control efficiency must be based on efficiency factors, as defined in part 7005.0100, subpart 9b, including air toxics, or must be based on the control efficiency verified by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050. The overall efficiency of a pollution control system that uses a hood, as defined in part 7011.0060, subpart 2, as the emission capture device must be based on a capture efficiency of 60 percent. If an alternative capture efficiency has been determined by a performance test conducted according to parts 7017.2001 to 7017.2060 and 7019.3050, that capture efficiency must be used in the calculation of actual emissions.

**Statutory Authority:** *MS s 116.062; 116.07*

**History:** *21 SR 165; 46 SR 1209; 50 SR 365*

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