§63.5335 How do I determine the actual HAP loss?

(a) This section describes the information and procedures you must use to determine the actual HAP loss from your leather finishing operation. By the fifteenth of each month, you must determine the actual HAP loss in pounds from your leather finishing operation for the previous month.

(b) Use one of the procedures listed in either paragraph (b)(1) or (b)(2) of this section for determining the actual HAP loss from your affected sources. Regardless of which procedure is used to determine HAP loss, each source is still required to maintain a written or printed log that documents the total quantity of solvents/finishes used each month in the process and the mass fraction of HAP in each solvent/finish.

(1) Measure Finish as Applied. Use a finish inventory log to record the pounds of each type of finish applied for each leather product process operation and the mass fraction of HAP in each applied finish. Figure 1 of this subpart shows an example log for recording the minimum information necessary to determine your finish usage and HAP loss. The finish inventory log must contain, at a minimum, the information for each type of finish applied listed in paragraphs (b)(1)(i) through (vii) of this section:

(i) Finish type;

(ii) Pounds (or density and volume) of each finish applied to the leather;

(iii) Mass fraction of HAP in each applied finish:

(iv) Date of the recorded entry;

(v) Time of the recorded entry;

(v) Name of the person recording the

entry;

(vii) Product process operation type. (2) Chemical Inventory Mass Balance. Determine the actual monthly HAP loss from your affected source through mass balance calculations. You must follow your detailed mass balance procedures and calculations in your plan for demonstrating compliance in accordance with §63.5325. The HAP mass balance must be based on a detailed inventory of stored chemicals at the beginning and end of each month, and business purchasing records to indicate additions to the inventory of chemical supplies. The net loss of chemicals used 40 CFR Ch. I (7-1-09 Edition)

for finish applications is determined by subtracting the end of the month chemical inventory from the beginning of the month chemical inventory and adding the quantities of all chemicals purchased during the same 1-month period. In situations when an excess amount of finish is formulated, you must have documented procedures on how the excess amount is accounted for in the mass balance.

(c) To determine the pounds of HAP loss for the previous month, you must first determine the pounds of HAP loss from each finish application according to paragraph (c)(1) or (2) of this section.

(1) For facilities not using add-on emission control devices, the entire HAP content of the finishes are assumed to be released to the environment. Using the finish inventory log, multiply the pounds of each recorded finish usage by the corresponding mass fraction of HAP in the finish. The result is the HAP loss in pounds from each finish application. Sum the pounds of HAP loss from all finish applications recorded during the previous month to determine the total monthly HAP loss in pounds from your finishing operation.

(2) For facilities using add-on emission control devices, the finish inventory log and the emission reduction efficiency of the add-on capture and control devices can be used to determine the net HAP loss in pounds. The emission reduction efficiency for a control device must be determined from a performance test conducted in accordance with §§ 63.5375 and 63.5380. Using the finish inventory log, multiply the pounds of each recorded finish usage by the corresponding mass fraction of HAP in the finish. The result is the gross HAP loss in pounds from each finish application prior to the add-on control device. Multiply the gross HAP loss by the percent emission reduction achieved by the add-on control device and then subtract this amount from the gross HAP loss. The result is the net HAP loss in pounds from each finish application. Sum the pounds of net HAP loss from all finish applications recorded during the previous month to determine the total monthly net HAP loss in pounds from your finishing operation.

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(d) After collecting HAP loss data for 12 months, you must also determine by the fifteenth of each month the annual HAP loss in pounds by summing the monthly HAP losses for the previous 12 months. The annual HAP loss is the "actual HAP loss," which is used in Equation 1 of §63.5330 to calculate your compliance ratio, as described in §63.5330.

[67 FR 9162, Feb. 27, 2002, as amended at 70 FR 6360, Feb. 7, 2005]

§63.5340 How do I determine the allowable HAP loss?

(a) By the fifteenth of each month, you must determine the allowable HAP loss in pounds from your leather finishing operation for the previous month.

(b) To determine the allowable HAP loss for your leather finishing operation, you must select the appropriate HAP emission limit, expressed in pounds of HAP loss per 1,000 square feet

of leather processed, from Table 1 of this subpart, for each type of leather product process operation performed during the previous 12 months. Under the appropriate existing or new source column, select the HAP emission limit that corresponds to each type of product process operation performed during the previous 12 months. Next, determine the annual total of leather processed in 1,000's of square feet for each product process operation in accordance with §63.5400. Then, multiply the annual total of leather processed in each product process operation by the corresponding HAP emission limit to determine the allowable HAP loss in pounds for the corresponding leather product process operation. Finally, sum the pounds of HAP loss from all leather product process operations performed in the previous 12 months. Equation 1 of this section illustrates the calculation of allowable HAP loss as follows:

$$\begin{array}{l} \text{Allowable}_{\text{HAP Loss}} = \sum_{i=1}^{n} \begin{pmatrix} \text{Annual Total} & \text{HAP} \\ \text{of Leather} & * & \text{Emission} \\ \text{Processed}_{i} & \text{Limit}_{i} \end{pmatrix} \quad (\text{Eq. 1}) \end{array}$$

Where:

- Annual Total of Leather Processed = 1,000's of square feet of leather processed in the previous 12 months in product process operation "i".
- HAP Emission Limit = From Table 1 of this subpart, the HAP emission limit in pounds of HAP loss per 1,000 square feet of leather processed for product process operation "i".
- n = Number of leather product process operation types performed during the previous 12 months.

(c) The resulting "allowable HAP loss" is used in Equation 1 of §63.5330 to calculate your compliance ratio, as described in §63.5330.

§63.5345 How do I distinguish between the two upholstery product process operations?

(a) Product process operations that finish leather for use in automobile and furniture seat coverings are categorized as an upholstery product process operation. There are two upholstery product process operations subject to the requirements of this subpart—operations with less than 4 grams of finish add-on per square foot, and operations with 4 grams or more of finish add-on per square foot. You must distinguish between the two upholstery product process operations so that you can determine which HAP emission limit in Table 1 of this subpart applies to your affected source.

(b) You must determine finish add-on by calculating the difference in mass before and after the finishing process. You may use an empirical method to determine the amount of finish add-on applied during the finishing process, as described in paragraphs (b)(1) through (4) of this section:

(1) Weigh a one square foot representative section of polyester film, paper, cardstock, or equivalent material substrate to be finished. This will provide an initial mass and surface area prior to starting the finishing process.