

CHAPTER 8—VENTILATION

Due Oct 8 at 12:59pm	Points 10	Questions 5	Time Limit None
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Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	23 minutes	8 out of 10

❗ Correct answers are hidden.

Score for this quiz: 8 out of 10
Submitted Oct 4 at 8:03pm
This attempt took 23 minutes.

Incorrect

Question 1

0 / 2 pts

What type of ventilation system would you recommend for a hazardous-waste storage tank into which toxic chemicals are transferred once per day?

☐ General Ventilation

☐ Supplied-air breathing system

☐ LEV

☒ Secondary Spill Containment

Question 2

2 / 2 pts

If you measure the average face velocity of a lab hood with the sash in the fully open position to be 50 ft/min and the dimensions of the hood are 2.5 ft wide by 2.0 ft high, at what height in inches should the sash be placed to increase the velocity to 100 ft/min?

☐ 2.5

☐ 1

☒ 12

☐ 8

☐ 1.2

Question 3

2 / 2 pts

What is the main disadvantage of a canopy hood?

☐ It is extremely expensive

☐ It can't take advantage of the natural direction of the effluent.

☐ It gets clogged very easily

☒ The plume may enter the worker's breathing zone.

Question 4

2 / 2 pts

Why is it necessary to make measurement at numerous places throughout an exhaust duct to estimate velocity?

☐ To counteract variability in air-stream density

☐ To counteract variability in the person measuring the system

☐ To counteract variability in the measurement instrument

☒ To counteract variability in the duct flow from turbulence and friction

Question 5**2 / 2 pts**

The blower (fan) you purchased for a local exhaust system is currently operating at 10,000 ft³/min at -3.0 in. w.g. FSP using a 2.0-bhp motor running at 500 rpm. If you now need to increase the exhaust to 20,000 ft³/min, how fast must the fan turn in rpm to achieve the new Q of 20,000 ft³/min? In addition, calculate the effects of this increase in Q on the FSP and bhp. Match the correct answers to the indicated parameters (Note: there are incorrect "detractors" in the selection choices).

RPM2

1000

**FSP2**

-12

**HP2**

16

Quiz Score: **8** out of 10