



## HAZWOPER: Air Monitoring Standard

Air monitoring by HAZWOPER determines the volume of contaminants in the air in work areas where employees may be exposed to hazardous materials. Monitoring tests are used to examine the breathing zones of workers to determine whether they are breathing in hazardous air or contaminants. This is called area monitoring and it is used to determine exposures affecting groups of workers.

This is a necessary safety precaution during site entry and cleanup operations. An area monitoring policy has to be applied to conditions at sites. The proper way to do this is to first determine what you are monitoring for, the equipment used for monitoring and how many times it will take place.

The policy that is set in place should also determine the concentration of contaminants present in the air. Using that information, the effectiveness of the engineering controls, safe work practices and personal protective equipment on the site should be evaluated.

Air contaminants can have a significant impact on the health of your workers if it is not contained. This can lead to loss in productivity and increase your retention rate as more and more workers fall ill. Therefore, prioritizing the identification of these contaminants should be your primary concern.

That is why air monitoring is considered to be an essential part of a health and safety program. With reliable evaluations of contaminants in the air are useful for the following:

- ✓ Selection of personal protective equipment (PPE).
- ✓ Determining areas where air safety is needed.
- ✓ Determining the potential health effects of exposure.
- ✓ Determining the need for specific medical monitoring.

The main aim of air monitoring is to determine airborne contaminants to identify the type of PPE workers need. The first screening is usually qualitative in nature in which the class of the contaminant is determined. The concentration level is usually determined after more tests are conducted.

There are basically 2 ways to quantify and identify air contaminants. These are:

1. The use of instruments that can be used for direct reading.
2. Lab analysis of air samples that are acquired via filtration, gas sampling bag, wet contaminant collection or sorbent procedures.

Air quality of a worksite should be monitored:

- ✓ At first entry.
- ✓ If there is a suspicion of a hazardous atmosphere in the work area.

The best way to monitor [air quality](#) in this instance is to identify the condition immediately to determine if it is an immediate threat to life and health. Similarly, air quality should also be tested after the cleanup phase of hazardous waste operations. This can be done via personal sampling methods to figure out which workers had the highest exposures.

Engineering controls combined with personal protective equipment and safe work practices is the best way to protect workers. If your workers use PPE during hazardous waste operations the written safety program should contain the following:

- ✓ Workers should maintain and store the equipment properly.
- ✓ All equipment should be decontaminated and discarded properly.
- ✓ Workers are trained to use the PPE and understand its limits. HAZWOPER air monitoring standards can protect your workers. [Make sure they are trained to prevent illnesses and to increase morale.](#)