

What is Industrial Hygiene Monitoring and What Value Is It?

Industrial hygiene monitoring also known as exposure monitoring is a process of evaluating and documenting employee potential exposures to biological, chemical and physical hazards. Monitoring can be qualitative, semi-quantitative or quantitative.

Qualitative assessments involve observing the operation and the employee and noting the potential hazards. For each hazard the frequency and duration of the exposure is noted and the severity and probability of a negative outcome is estimated. Based on these assessments, determinations are made if further evaluation is necessary.

Semi-quantitative exposure assessments involve mathematical models to predict exposures or the use of direct-reading instruments. There are limitations to both activities, but the information can be very valuable in determining if quantitative assessments should be conducted.

Quantitative chemical assessments involve a pump that draws air through a collection media and a laboratory analysis of the collection media to determine the average airborne concentration of a particular chemical agent. During this process an employee wears the sampling equipment so their exposure during their normal workshift can be determined. Noise can also be measured in a similar fashion.

The information obtained during these assessments can be used for the following:

- Demonstrate compliance with a particular OSHA standard
- Protection against worker compensation claims alleging health effects due to exposures
- Verification of effectiveness of engineering controls
- Reassurance for workers that the workplace is safe
- Establishing a program for periodic monitoring and remonitoring
- Selection of appropriate respiratory protection
- Determining need for ventilation installations.

For more information, contact Cathy Pletz, Frank Gates Service Company, at (800) 777-4283.