**Minican Solutions**

When employees express concerns about potential workplace exposures, the employer must often determine the validity of these concerns. Occupational exposure concerns are not limited to industrial settings and often include office and residential environments. In many situations, the employees' concerns are non-specific and the exposure environment is not clearly defined. It's not uncommon for these situations to become the focus of workers' compensation or legal actions. Workers' compensation administrators and legal counsel frequently seek consultants to assess exposures to a variety of chemical, physical agent and biological compounds. Experienced consultants often use the minican methodology (OSHA PV2120) to determine the presence or absence of compounds of concern in both workplace and residential environments.

Minicans offer analytical advantages including method sensitivity, and practical advantages including portability and flexible sample rates. Minicans can be drop shipped to sample locations when traveling with equipment becomes problematic. They are intrinsically safe, with no electrical requirement. Consultants are often interested in determining the presence or absence of various suspect compounds. Using the OSHA PV2120 method, 63 different, most commonly expected volatile organic compounds can be quantified in one sample.

You also have the option of doing a library search. This is where any significant unknown peaks in the chromatogram are tentatively identified based on their mass spectra. Every compound has a unique mass spectrum that can be used to attempt to identify the compound – even if you have no idea what it is. The mass spectrum of a compound may be very close to other similar compounds – which makes any identification using this approach a tentative identification. If these compounds are identified in significant concentrations on an initial evaluation, the consultant may recommend further sampling and analysis of these now-targeted compounds.

In addition to their ease of use, flexible sampling rates, portability and method sensitivity, minicans may also be modified for atypical sample situations. In one such situation, a consultant client of Galson Laboratories worked with a gas supplier who suspected contamination within their helium supply system following a recent valve repair and cleaning process. The consultant explained, "Galson Laboratories

configured the minican to take a sample directly from the supply line, which allowed our client the ability to sample the supply line directly, avoiding cross contamination from the outside air.” There are many different ways the minicans can be configured to deal with unique sampling situations.

The consultant added, “We were able to utilize this sample approach on multiple occasions to demonstrate the effectiveness following each phase of contaminant mitigation. “

Minicans can be a solution for you, too.