



## Indoor Air Quality Testing

With increased awareness and knowledge, indoor air quality has become an important health and safety concern. Depending on the work processes within your facility, the materials used or handled and/or the heating or ventilation systems, your workers may be exposed to contaminants in the air that can put their health at risk.

Employers, contractors and owners are expected to provide safe working conditions, and this includes ensuring the adequate ventilation of a place of employment, and providing a supply of clean and wholesome air and maintaining its circulation throughout a place of work. *The Saskatchewan Occupational Health and Safety Regulations, 1996* includes a number of requirements related to ventilation and air supply.

SASM performs general area air quality testing and personal dosimetry.

### General Area

SASM tests Indoor Air Quality (IAQ) using a Quest Environmental Monitor (EVM – 7). This direct reading instrument simultaneously monitors both particulates and air quality and provides real time measurements of the following:

- Particulate mass concentration (0.1 to 10 µm size)
- Toxic gases (CO<sub>2</sub>, CO)
- Volatile Organic Compounds (VOCs)
- Temperature
- Relative humidity

The General Area indoor air quality testing performed with the EVM – 7 does not identify the type of particulate (e.g. manganese, iron, etc.) but does provide data for different sizes of particulate. This testing also does not provide data about individual vapors but is useful for VOC screening and monitoring.

### Personal Dosimetry

Personal dosimeters by Sensidyne (GilAir Plus pumps) are used to sample for personal exposure to dusts. This test identifies the following:

- Total amount of particulate matter a specific worker is exposed to during the duration of his/her shift.
- The type and quantity of elements constituting the total particulate (e.g. aluminum, arsenic, chromium, copper, iron, lead, manganese, zinc, etc.). ***It does not differentiate the size of the particulates (inhalable or respirable fractions).*** Please contact SASM for a complete list of testable elements.

On a single day, up to a maximum of five (5) workers can be monitored. If required, a personal dosimeter can be used to collect a sample from a specific area for area wide data collection. The personal samples are submitted to the Saskatchewan Research Council Laboratory for analysis.



### **Deliverables**

SASM's Occupational Hygiene Specialist will provide an assessment report which includes:

- Description of the testing strategy
- Results of testing
- Observations and recommendations
- A digital copy of the report