

# Adverse Health Effects From Air



Alpha-Beta Particle Monitor



Synspec Full GC-MS



Our innovative new technique can screen for endocrine disruptors, Neurotoxicity and Mutagenicity in air. **This is something that has never been done before and will save thousands of dollars in sampling costs.** This application is useful for determining if air quality is an issue for landowners, during routine reclamation processes, and in the event of spills. Call us today to learn more.

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1423 45 Ave NE, Unit F  
Calgary, Alberta,  
T2E 2P3  
1-800-749-1947



LIFE SCIENCE FORENSICS

# Adverse Health Effects From Air

- ▶ One of the most common requests that we get is to evaluate the potential for adverse health effects due to odors generated in the field due to oil and gas operations. Ambient air monitoring equipment is adequate for routine monitoring purposes as are passive filters, but cannot address novel or high-end parameters in terms of detection limits and the limitations to small amounts of potential analytes. **Point source testing using summa canisters, or charcoal tubes is much more accurate, but still requires pre-knowledge of the contaminants of concern in order to test for them.**
- ▶ **Never before has this technique been applied to air samples and it is unique to LSF.** Genetically modified yeast is used to test estrogenic response potency. This new technique has the ability to test for potential adverse health effects. This method can be augmented with conventional testing methods to pinpoint sources and remediate the issues. A positive dose-response curve of 17 $\beta$ -estradiol is used as a reference. This is a new technique that shows if there is actually a potential for adverse health effects. At this point, conventional testing can be performed to pinpoint sources and remediate the issues. Neurotoxicity and mutagenicity assays are also available. This can be used in conjunction with spill events, routine monitoring of sites, or during excavation events.