

Hygiene Consultants Reports: What to Expect

It is prudent and expected that Nova Scotia employers identify and, where needed, qualify and quantify the hazards in their workplace. This is all part of effectively controlling hazards in the workplace. Part of a hazard assessment, may involve hiring a consultant with specific expertise to monitor health hazards and provide a comprehensive, understandable report. This may be as a result of an internal hazard assessment conducted by workplace parties, or due to an officer identifying a hazard that requires specialized expertise. Where an officer has ordered the assessment, it may be helpful to inquire of the officer whether the results of work being proposed will be sufficient to ensure that the officer will accept the work as 'compliance' with the order.

A well written report is required in order to satisfy the need to qualify or quantify a hazard as a result of an assessment; this report needs to answer the question or concern expressed in a manner that is easily understood. To do this, it needs to describe what data is collected and how the data was collected and analyzed, ensuring that the assessment is conducted by recognized monitoring methodologies (e.g. NIOSH, OSHA, etc). The report should also include recommendations for control measures to ensure compliance with current Nova Scotia OHS legislation and regulations.

The report should include, as a minimum, an introduction, description of the process or environment that is being assessed, the method used to gather data, a summary of the results and a discussion of the implications of those results, and a conclusions and recommendations section.

Here is an example of the content that is expected:

Introduction

What are the purpose and objectives of the report? What are the dates of the site visits? Who is the report being prepared for and who is the report being prepared by? What are the qualifications of the entity that prepared the report?

Note: Consultants should clarify whether the contracted work contracted is a result of an OHS officers report or order so that they have a full understanding of the issue(s) to be addressed.

Process/environment description

Full details of the exposure assessment on each work process and/or the whole workplace should be described. How many processes are involved? What is the agent that is being assessed? How many workers may be exposed? How long and how often are the workers exposed? Does the exposure stabilize or fluctuate?

The consultant should be present during the work activity being monitored so they are able to describe any anomalies during the assessment. If it is not practical for the consultant to monitor the process, they must arrange for the process to be monitored and be confident that the conditions described by others present are true and accurate.

Methods and measurements

1. Sampling method:
 - a. Standard sampling method must be chosen, which should be determined from NIOSH/OSHA/EPA/ASTM.
 - b. Based on the method, sampling equipment should be identified, such as surface sampling, colorimetric tube, sorbent tube, cassettes, sampling bag, passive badge or direct reading?
 - c. The rationale on choosing this method and equipment needs to be given. Is it for instant ceiling exposure, or Short Term Exposure (STE) or whole shift?
 - d. Which Occupational Exposure Limit (OEL) will be used to compare to the sampling results? Ceiling or Short Term Exposure Limit (STEL) or Time Weighted Average (TWA) (8 hours or 40 hours) or 24-hours or annual standards? If there are extended shifts, what rationale is used to adjust the OEL's.

2. Is personal sampling or area sampling used and why? This will depend on what question needs to be answered. (i.e. assessment of controls or exposure) In terms of establishing the correlation between exposure and health effects, personal sampling is more accurate and powerful than area sampling. Area sampling is generally used for large scale steady exposure when the exposure criteria are homogeneous across the workers on one process. Personal exposure monitoring can be used to help evaluate the working environments but are not always indicative of "safe" or "unsafe" conditions

Results and discussion

This section will provide a summary of the data collected (the full raw data may be added in an appendix to the report). The discussion will include a comparison of the conditions or exposures in the areas monitored against the acceptable limits in current regulations. Results must be evaluated in the context of the conditions at the time of monitoring. Health complaints or symptoms should never be ignored even if test results do not identify an issue at the time of monitoring. An explanation for their cause must be explored. There may be other routes of exposure needed to be considered.

Conclusions and recommendations

Based on the sampling results and discussion and the occupational exposure limit (OEL) or other relevant standards/guidelines, the report will establish relation between the health effects/complaints and the exposure. Conclusions will be drawn from this discussion.

From the conclusions, detailed recommendations should be given for the improvement of the present exposure condition. These recommendations should be in the priority listed below:

- a. Engineering control
- b. Safe work procedure
- c. Administrative measures
- d. Use of PPE

Additional guidance for hygiene reports may be found on the internet to meet the above requirements. A good example was prepared by the Australian Institute of Occupational Hygienists, Inc. at:

http://www.aioh.org.au/downloads/documents/AIOH_OHReportGuideline.pdf