There are two main factors which affect whether chemicals in the workplace are likely to harm health:

- the type of damage the chemical causes and the amount needed to cause that damage; and
- how much is likely to get into the air and be breathed in or come into contact with the skin or eyes.

This in turn depends upon its dustiness or its ability to produce vapors or gases in air.

The Controlling Chemical Hazards guideline and web project uses this information and chemical information gathered from safety data sheets and other sources information to select one of four control approaches (bands). The need for more effective control approaches increases with the likelihood of a chemical (or mixture) to harm health if left uncontrolled.

**Four Control Approaches**

The Controlling Chemical Hazards guideline and web project recommends four control approaches that depend on the need reduce worker exposure because of a chemical’s potential to harm health (see GS General Guidance).

<table>
<thead>
<tr>
<th>Control Band</th>
<th>Type</th>
<th>Relative Effectiveness</th>
<th>General description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Ventilation</td>
<td>1</td>
<td>A good standard of general ventilation and good working practices.</td>
</tr>
<tr>
<td>2</td>
<td>Engineering Control</td>
<td>10-fold reduction</td>
<td>Local exhaust ventilation ranging from well-positioned capturing and receiving hoods to effective partial enclosing hoods.</td>
</tr>
<tr>
<td>3</td>
<td>Containment</td>
<td>100-fold reduction</td>
<td>Full enclosures and containment, where small-scale breaches may be expected.</td>
</tr>
<tr>
<td>4</td>
<td>Special</td>
<td>-</td>
<td>Expert advice is required to select appropriate control measures.</td>
</tr>
</tbody>
</table>

In order to determine which control applies when, supervisors should work with the owner’s site representative (Planner) to gather information about the types of chemicals that will be present and how they will be used. Then you can develop (or have the Planner develop) a Chemical Hazards Management Plan based on the control approach that best fits the type of work you plan to undertake.

The simplest way to decide on the appropriate control band is to use the Controlling Chemical Hazards guideline and/or web project at www.enform.ca.

**SUPERVISOR RESPONSIBILITIES**

- Validate the Chemical Hazards Management plan at the work site.
- Make sure required safety equipment is available.
- Provide guidance sheets and material safety data sheets to workers.
- Ensure workers are trained on how to work safely.
- Conduct a job safety analysis to look at other hazards.
- Make sure all hazards are controlled.