General Risk Assessment

In order to prevent workplace injury, disease or property damage, it is necessary to identify the causes of accidents and failures in management control, which can lead to such harm or damage. This can be achieved from the following methods:

a) Accident/Incident investigation. REACTIVE MEASURE

b) Risk Assessment. PROACTIVE MEASURE

Risk assessment is the preferred method since the control measures are put into place to reduce the risk to an acceptable level and prevent accidents occurring.

2.1. Terminology

To be able to conduct a risk assessment it is important to understand the terminology used. The important ones are defined below.

**Hazard** - Something that has the potential to cause harm.

Examples of hazards are:

a) An unguarded piece of machinery.
b) Articles left in a walkway.
c) Slippery floors.
d) Harmful chemicals.

**Risk** - Risk is likelihood of harm to persons, property or the environment being realized from a hazard.

**Control Measure** - Actions taken to minimize risk.

Examples of control measures are:

a) Physical barriers for the protection of the operator.
b) Work instructions for operating machinery.
c) Training and instruction.
d) Personal protective equipment.

**Severity Factor** - The potential level of injury or damage resulting from insufficient control measures.

- Factor 1 Trivial No injury, property damage, exposure <OES
- Factor 2 Minor Cuts, bruise, graze, exposure ≈OES
• Factor 4 Moderate Strain, sprain, break, exposure > OES
• Factor 7 Major Irreversible effects or long recovery period
• Factor 10 Death Death or terminal condition.

Note that the examples given are just for guidance. Many injuries will fall into multiple categories depending on severity of the outcome e.g. a chemical burn could be factor 4, 7 or 10 depending on the properties of the substance and the degree of body coverage. Personal judgment should be used in such cases.

Probability Factor - This is the likelihood of an identified event occurring.

• Factor 1 (almost) Impossible.
• Factor 2 Highly unlikely.
• Factor 5 Possible.
• Factor 7 Likely.
• Factor 10 (almost) Certain.

Risk Rating - = Severity Factor X Probability Factor

The risk rating is a calculated figure that determines the speed of response required to implement the control measures. It is based on the severity factor and the likelihood of that harm being caused.

The risk matrix (Table 1) can be used to assess risks for existing and new tasks.

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Death</th>
<th>Major</th>
<th>Moderate</th>
<th>Minor</th>
<th>Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>(almost) Certain</td>
<td>100</td>
<td>70</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Likely</td>
<td>70</td>
<td>49</td>
<td>28</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Possible</td>
<td>50</td>
<td>35</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Highly unlikely</td>
<td>20</td>
<td>14</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>(almost) Impossible</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1.

For the purposes of evaluation, the darker the shading the more likely it is that the risk is not adequately controlled. However, the specific guidelines given in Table 2. (below) should be followed:-
<table>
<thead>
<tr>
<th>Risk Value</th>
<th>Existing Task</th>
<th>New Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 –10</td>
<td>Trivial risk - No further action</td>
<td></td>
</tr>
<tr>
<td>11 – 19</td>
<td>Tolerable risk – No further action</td>
<td></td>
</tr>
<tr>
<td>20 – 49</td>
<td>Inadequately controlled risk –</td>
<td>Inadequately controlled risk – add control measures or eliminate task</td>
</tr>
<tr>
<td></td>
<td>Additional control measures must be introduced within an appropriate timeframe and recorded in the action plan.</td>
<td></td>
</tr>
<tr>
<td>50 +</td>
<td>Uncontrolled risk – Stop work until control measures are implemented</td>
<td>Uncontrolled risk - add control measures or eliminate task</td>
</tr>
</tbody>
</table>
**HEALTH & SAFETY RISK ASSESSMENT:**

**Battery 1**

*Description:*
Batterybacks Located in Supermarkets, Schools, Offices and Similar Locations.

N.B.: This Risk Assessment is advisory and not site specific. Locations are advised to have an on site assessment conducted by their H & S Representative.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Hazards Identified</th>
<th>Severity Rating</th>
<th>Probability Rating</th>
<th>Initial Risk Rating</th>
<th>Control Measures in place (or intended to be in place)</th>
<th>Final Risk rating</th>
<th>Further Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fire risk</td>
<td>7</td>
<td>5 (2)</td>
<td>35</td>
<td>The drum and contents must remain dry at all times&lt;br&gt;The drum must be located inside the building&lt;br&gt;</td>
<td>14</td>
<td>Yes Monitor Contents</td>
</tr>
<tr>
<td>2</td>
<td>Release of flammable gases</td>
<td>7</td>
<td>5 (2)</td>
<td>35</td>
<td>The drum and contents must remain dry at all times&lt;br&gt;The drum must be located inside the building&lt;br&gt;No damaged or leaking batteries to be deposited in the drum&lt;br&gt;No liquids of any sort must be deposited in the drum&lt;br&gt;No combustible material to be deposited in the drum&lt;br&gt;No Wet batteries to be deposited in drum (e.g. Car Batteries or Accumulators)</td>
<td>14</td>
<td>Yes Monitor Contents</td>
</tr>
<tr>
<td></td>
<td>Category</td>
<td>Row</td>
<td>Col</td>
<td>Column</td>
<td>Requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Incompatible batteries or other materials being deposited</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>The drum must be clearly labelled and identified as being: For waste dry batteries only Not suitable for disposal of Wet batteries (e.g. car batteries or accumulators) or other wet electrolyte batteries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Manual handling</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>Where the container weighs in excess of 20kg A suitable trolley or barrow must be used to manoeuvre the drum Avoid stairs and steps wherever possible and use ramps or lifts if available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Staff awareness of the purpose of drum and the potential hazards</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>The Risk Assessment and issues arising from it must be communicated to the appropriate staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Collection of the Batteryback</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>The Consignment Note must be completed by the WasteCare driver and signed by a competent member of staff. The drum must display:- The correct consignment note number The EWC Code 20 01 33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>