Health Risk Assessment

Ha‌ll‌e‌d terms can be found in the HSSE & SP Control Framework Glossary.

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Purpose
To avoid harm to people due to Health Hazard by carrying out Health Risk Assessment (HRA) and implementing the control and recovery measures specified.

HRA is the application of the Hazards And Effects Management Process to Health Hazards, as described in Managing Risk.

Who is this for?
- Managers; and
- Supervisors; and
- HRA Authorised Subject Matter Experts.

What situations are/are not covered?

This manual section applies to:
- all Health Hazards associated with work;
- existing operations, maintenance and turnaround activities, new projects, and acquisition, closure, divestment and abandonment of facilities; and
- Contractor activities as described in the Contractor HSSE Management Manual.

This manual section does not apply to:
- safety hazards like slips, trips and falls, electricity, hot surfaces, fires and explosions, which are covered in other manuals in the HSSE & SP Control Framework.

Requirements
The Manager is Accountable for requirements 1 to 4.

1. Have the HRA process carried out, covering all Locations or Activities.
   1.1. Appoint or obtain an HRA Authorised Subject Matter Expert to lead the HRA process or update the HRA document.
   1.2. Provide Location or Business specific information and other resources required for the HRA.

2. Review the HRA recommendations with the HRA Authorised Subject Matter Expert and agree a Remedial Action Plan.
   2.1. Implement the Remedial Action Plan to completion.
   2.2. Maintain the Control and Recovery Measures specified in the HRA.
   2.3. Arrange exposure monitoring and medical surveillance programmes where necessary.

3. Communicate relevant HRA Risks and Controls to impacted staff.

4. Review the HRA when changes to operations or Organisations are proposed, as described in Management of Change.
   4.1. Consider whether:
      - the Health Hazards and risks identified in the HRA are still present;
      - new Health Hazards have been introduced; and
      - the Control and Recovery Measures are still appropriate.

The HRA Authorised Subject Matter Expert is Responsible for requirements 5 and 6.

5. Lead the HRA process.
   5.1. Use the following HRA methodology established by Shell Health, using oneHealthIT or equivalent:
- Define jobs and tasks to be included.
- Prepare a Health Hazard inventory.
- Assess the Risk to health from each Health Hazard by applying the RAM.
- For RAM red and yellow Health Risks, consider if the Control and Recovery Measures in place take the Risk As Low As Reasonably Practicable, and recommend improvements where necessary, using the following Hierarchy Of Control:
  - **First:** Eliminate the Health Hazard.
  - **Second:** Substitute the Health Hazard with a less harmful type or form.
  - **Third:** Use engineering Controls.
  - **Fourth:** Use operational/procedural controls.
  - **Fifth:** Use Personal Protective Equipment.
- Recommend or revise Fitness to work, exposure monitoring and medical surveillance requirements where necessary.
- Present the HRA report to the Manager.

6. **Update existing HRAs with new hazard information.**
   6.1. Inform Managers about relevant changes such as toxicity classifications, exposure limits or new insights about health effects.
Implementation Deadlines

Businesses must now implement requirements of this manual section as soon as practicable, with risk-based prioritisation against other activities.

Gap assessment and closure plan: Developed by the Businesses
Latest date: December 31, 2009

Requirements into effect: Developed by the Businesses
Latest date: December 31, 2012

Implementation Strategy

Shell Health will ensure access to a valid HRA and/or Remedial Action Plan covering all locations or activities within Shell under operational control before end of 2009.
## Assurance Protocol

<table>
<thead>
<tr>
<th>Requirement in manual section</th>
<th>Key Words</th>
<th>Survey Questions</th>
<th>Field Observations &amp; Documentation, Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>To avoid harm to people due to Health Hazard by carrying out Health Risk Assessment (HRA) and implementing the control and recovery measures specified. HRA is the application of the Hazards And Effects Management Process to Health Hazards, as described in Managing Risk.</td>
<td>HSSE &amp; SP Assurance</td>
<td></td>
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<td><strong>Who is this for?</strong></td>
<td>Managers; Supervisors; and HRA Authorised Subject Matter Experts.</td>
<td></td>
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<td><strong>What situations are covered?</strong></td>
<td>all Health Hazards associated with work; existing operations, maintenance and turnaround activities, new projects, and acquisition, closure, divestment and abandonment of facilities; and Contractor activities as described in the Contractor HSSE Management Manual.</td>
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<td><strong>What situations are not covered?</strong></td>
<td>Safety hazards like slips, trips and falls, electricity, hot surfaces, fires and explosions, which are covered in other manuals in the HSSE &amp; SP Control Framework.</td>
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The Manager is responsible for requirements 1 to 4 below:

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<tr>
<td>1. Have the HRA process carried out, covering all Locations or Activities.</td>
<td>Health Risk Assessment</td>
<td>What locations and activities apply to the Business? Are they all covered by the HRA?</td>
<td></td>
</tr>
<tr>
<td>1.1 Appoint or obtain an HRA Authorised Subject Matter Expert to lead the HRA process or update the HRA document.</td>
<td>Subject Matter Expert, documentation</td>
<td>Who is the Authorised Subject Matter Expert? How has their competency been assessed? Has the Authorised Subject Matter Expert been involved in all HRA documentation updates?</td>
<td>Competency assessment records, Position descriptions, Health Risk Assessment</td>
</tr>
<tr>
<td>1.2 Provide Location or Business specific information and other resources required for the HRA.</td>
<td>Resources</td>
<td>Who was involved in the development of the HRA? Have any locations or businesses not been represented in the HRA team? How has their competency been assessed?</td>
<td>Competency assessment records, Position descriptions, Health Risk Assessment</td>
</tr>
<tr>
<td>2.1. Implement the Remedial Action Plan to completion.</td>
<td>Implement</td>
<td>Who is responsible for undertaking the remedial actions? How is this requirement communicated? How are the actions tracked to ensure completion?</td>
<td>Health Risk Assessment, Remedial Action Plan, Goals and Performance documentation</td>
</tr>
<tr>
<td>2.2. Maintain the Control and Recovery Measures specified in the HRA.</td>
<td>Maintain, Controls</td>
<td>How is the ongoing robustness of the Control and Recovery Measures assured? What action is taken when measures are found to be not meeting the desired reduction in risk?</td>
<td>Business audit plan.</td>
</tr>
</tbody>
</table>
### 2.3. Arrange exposure monitoring and medical surveillance programmes where necessary

- **Exposure monitoring, medical surveillance**
- **What exposure monitoring and medical surveillance programmes are required by the HRA? Who manages the implementation of the programme? Who is responsible for reviewing the results?**
- **Health Risk Assessment, exposure monitoring and medical surveillance programme records.**

### 3. Communicate relevant HRA Risks and Controls to impacted staff.

- **Communicate**
- **How are relevant staff made aware of the HRA Risks? How are changing risks conveyed to impacted staff?**
- **Toolbox talk minutes, induction programmes, hazard awareness training programmes**

### 4. Review the HRA when changes to operations or Organisations are proposed, as described in Management of Change.

- **Review, Management of Change**
- **What changes trigger a review of the Health Risk Assessment?**
- **Management of Change procedure and records**

#### 4.1. Consider whether:
- the Health Hazards and risks identified in the HRA are still present;
- new Health Hazards have been introduced; and
- the Control and Recovery Measures are still appropriate.

- **Management of Change**
- **Who is involved in reviewing the impact of the change? How is their competency assessed? How is the HRA updated to reflect the change?**
- **Management of Change procedure and records, competency assessment records**

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**The HRA Authorised Subject Matter Expert is accountable for requirement 5 and 6 below:**

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<tr>
<td>5. <strong>Lead the HRA process.</strong></td>
<td>Leadership</td>
<td>Who is responsible for leading the HRA process for the business?</td>
<td>Position descriptions</td>
</tr>
</tbody>
</table>

#### 5.1 Use the following HRA methodology established by Shell Health, using oneHealthIT or equivalent:
- Define jobs and tasks to be included.
- Prepare a Health Hazard inventory.
- Assess the Risk to health from each Health Hazard by applying the RAM.

- **Methodology, Hazard Inventory, Assessment, ALARP, Hierarchy of Control, Exposure monitoring, medical surveillance**
- **Who is involved in developing the Health Hazard registry? How is their competency assessed? What RAM ratings have been applied to various Health Hazards? How has the Hierarchy of control been applied to RAM Red and Yellow Health Hazards? What**
- **Health Risk Assessment, Health Hazard Register**

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- For RAM red and yellow Health Risks, consider if the Control and Recovery Measures in place take the Risk As Low As Reasonably Practicable, and recommend improvements where necessary, using the following Hierarchy Of Control:
  - First: Eliminate the Health Hazard.
  - Second: Substitute the Health Hazard with a less harmful type or form.
  - Third: Use engineering Controls.
  - Fourth: Use operational/procedural controls.
  - Fifth: Use Personal Protective Equipment.
  - Recommend or revise Fitness to work, exposure monitoring and medical surveillance requirements where necessary.
  - Present the HRA report to the Manager.

### 6. Update existing HRAs with new hazard information.

<table>
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<tr>
<th>Category</th>
<th>Action</th>
<th>Question</th>
<th>Change Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update</td>
<td></td>
<td>What changes trigger a review of the Health Risk Assessment? Who is involved in reviewing the impact of the change? How is their competency assessed? How is the HRA updated to reflect the change?</td>
<td>Management of Change procedure and records</td>
</tr>
<tr>
<td>Inform, change</td>
<td></td>
<td>What is the engagement process utilised to inform Managers about changes to Health risks?</td>
<td>Management Committee minutes, correspondence</td>
</tr>
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