Can the new EMS standard help drive improvement in the environmental outcomes of your business?

Reinvigorating Environmental Management

Workshop facilitated by
Julie Dickson - CenvP 20/06/2017
Why have an EMS? – What the standards specify in “Scope”

ISO 14001:2015

- Can use to **enhance its environmental performance.**
- Help achieve its **intended outcomes** which provide value for the environment, the organisation and interested parties. These include
  - enhanced environmental performance,
  - fulfil compliance obligations,
  - achieve environmental objectives

ISO 14001:2004

- To enable an organisation to develop and implement a policy and objectives which take into account legal and other requirements and information about significant environmental aspects – applies to the aspects it can control and those it can influence
ISO 14001:2015: NEW

4. Context
4.1 Understanding organisation & context
4.2 Needs & expectations of interested parties, scope, EMS

5. Leadership
5.1 – 5.3 Leadership, Policy, Roles, Responsibility

6. Planning
6.1 Risks & Opportunities, Aspects, Compliance Obligations, Actions
6.2 Enviro Objectives, planning to achieve them

7. Support
7.1 Resources
7.2 Competence
7.3 Awareness
7.4 Communications
7.5 Documented Information

8. Operation
8.1 Ops planning & control
8.2 Emergency response

9. Performance evaluation
9.1 Evaluation of compliance
9.2 Internal audit, Management Review

10. Improvement
10.2 NCR, Corrective action

ISO 14001:2004: OLD

4.1 General
4.2 Environmental Policy
4.3 Planning
4.3.1 Environmental Aspects
4.3.2 Legal and Other Requirement
4.3.2 Objectives, Targets and Programme

4.4. Implementation & Operation
4.4.1 Resources, Roles, Responsibilities
4.4.2 Competence Training and Awareness
4.3.3 Communications, Documents, Operational control, emergency response

4.5 Checking
4.5.1 Monitoring and Measurement
4.5.2 Evaluation of Compliance
4.5.3 NCR corrective and preventive action
4.5.4 Control of records
4.5.5 Internal Audit

4.6. Management Review
PLAN – DO – CHECK – ACT Model

4. Context
5. Leadership
6. Planning
   6.1 Risks & Opportunities, Aspects, Compliance Obligations, Actions
   6.2 Enviro Objectives, planning to achieve them
7. Support
   7.1 Resources
   7.2 Competence
   7.3 Awareness
   7.4 Communications
   7.5 Documented Information
8. Operation
   8.1 Ops planning & control
   8.2 Emergency response
9. Perf. evaluation
   9.1 Evaluation compliance
   9.2 Internal audit, Management Review
10. Improvement
    10.2 NCR, Corrective action
What are the key changes?

- Structure is now aligned to ISO 9001:2015, less documentation required, more integration of elements

- Broader application – need to consider lifecycle, and need to integrate into company’s business processes – more strategic
Life Cycle Perspective - concrete

Cement manufacture
- Heat
- Raw materials
- Industrial Waste reuse

Co2 emissions
- Energy used
- Pollution

Energy used
- Packaging waste
- Printing ink etc.

Fuel / energy use
- Vehicle emissions
- Road congestion

Concrete batching
- Co2 emissions
- Energy used
- Dust, air Pollution

Concrete transport
- Fuel / energy use
- Vehicle emissions
- Road congestion

Materials used
- Embodied energy
- Energy – concrete pumping

Infrastructure and Building construction

Dispose to landfill
- Resource wastage

Crush / Re-process
- Re-use

Building & infrastructure demolition

Transport
What are the key changes (cont’d)?

• Leadership and Commitment – enhanced – top management need to “demonstrate” this
• Need to understand your context – internal and external issues (environmental conditions you can affect or can affect you)
• Understand needs and expectations of interested parties – identify who; what; and which ones become compliance obligations
Context – internal & external issues
Workshop activity 1

Determine internal and external issues relevant to the organisation
Workshop activity 2

Interested parties: Determine:

- The interested parties that are relevant to the organisation
- The relevant needs and expectations (requirements)
- Which of the identified needs and expectations becomes a compliance obligation
What are the key changes (cont’d)?

- Risks and Opportunities – looking at beneficial impacts as well as negative (threats)
  - Risks can become opportunities, part of strategic planning
  - SWOT
  - “Reverse Risk Assessment”
## Risks to Opportunities

<table>
<thead>
<tr>
<th>Revenue Growth</th>
<th>Save costs</th>
<th>Reduce Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare the organisation to thrive in a carbon and water constrained economy</td>
<td>Improve decision making through robust understanding of risks and opportunities in the wider context of the organisation</td>
<td></td>
</tr>
<tr>
<td>Grow brand recognition through leadership on high profile environmental issues</td>
<td>Reduce exposure to volatility in fossil fuel markets</td>
<td></td>
</tr>
<tr>
<td>Increase sales to environmentally aware and responsible people</td>
<td>Avoid reputational and financial costs due to legislative breaches and community outrage</td>
<td></td>
</tr>
<tr>
<td>Improved employee productivity through engagement</td>
<td>Use less raw materials through beneficial reuse of by-products (own or others)</td>
<td>Be prepared for increased regulations and restrictions on emissions</td>
</tr>
<tr>
<td>Maintain “Licence to Operate” and stakeholder goodwill wherever the company operates</td>
<td>Improved regulator relationships</td>
<td></td>
</tr>
<tr>
<td>Meet client and regulator needs to secure ongoing work</td>
<td>Planning to avoid initial environmental damage, clean-up and rehabilitation costs</td>
<td></td>
</tr>
<tr>
<td>Identify new areas for innovation and new technologies</td>
<td>Less potential for attention from activists</td>
<td></td>
</tr>
</tbody>
</table>
SWOT

Strengths
(areas you do well or advantages of your organization)

Opportunities
(external factors that may contribute to your organization and can build up your strengths)

Weaknesses
(areas to be improved)

Threats
(potential problems/risks caused by external factors that your organization may face)
## Reverse Risk Assessment

### Opportunity Score Calculator

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Consequence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>11</td>
<td>16</td>
<td>20</td>
<td>23</td>
<td>25</td>
<td>A = Insignificant</td>
<td>1 = Rare</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>12</td>
<td>17</td>
<td>21</td>
<td>24</td>
<td>B = Minor</td>
<td>2 = Unlikely</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>8</td>
<td>13</td>
<td>18</td>
<td>22</td>
<td>C = Moderate</td>
<td>3 = Possible</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>14</td>
<td>19</td>
<td>D = Major</td>
<td>4 = Likely</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>15</td>
<td>E = Significant</td>
<td>5 = Almost Certain</td>
</tr>
</tbody>
</table>

### Opportunity Category Table

<table>
<thead>
<tr>
<th>EXTREME</th>
<th>PROJECT MANAGER TO PURSUE – Senior Management to be involved where necessary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Coordinated project management team response needed. Specific responsibilities to be communicated and delegated by the Project Manager.</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Delegated project management team representative needed.</td>
</tr>
<tr>
<td>LOW</td>
<td>Manage by routine procedures along with communication and consultation on a regular basis.</td>
</tr>
</tbody>
</table>
Workshop activity 3

Risks and Opportunities

- SWOT Analysis – focus on the Opportunities and Threats (Risks)
- Consider Lifecycle perspective
- Activities, products and services it can control or influence
What are the key changes (cont’d)?

- More robust communication requirements – need process to define What, When, Who and How
- New term – documented information. “Retain” means keep records, “Maintain” refers to documentation other than records. Procedures can be documented or not.
- No specific “Preventive Action” – EMS itself is the tool
What do the changes mean for business?

- Enhanced opportunities to engage senior management to drive improvement – better strategic planning and integration with other business processes
- Drives better understanding of the needs and expectations of interested parties including regulators
- Compliance obligations better understood and embedded throughout EMS and business processes
- Enhanced ability to identify opportunities and plan how to implement and allocate resources in a systematic way
Critical factors for success?

- Top management leadership, commitment, strategic thinking— influenced by passionate environmental staff
- Setting relevant, measurable objectives – “doing more good” as well as “doing less harm”.
- Good tools and simple documented systems with good records management / retrieval
- Positive culture from management, staff and contractors to want to make a difference
- Use the ISO 14001 to drive change and improvement – the new standard should enhance this ability
Potential factors for failure

- Converse of last slide – lack of management commitment
- Integrated systems managed by non-environmental background people (e.g. – OHS / quality) – can ‘water down” environmental focus
- Unimaginative objectives / Targets / KPIs
- Culture of “just getting the ticks” or similar
- Lack of resourcing – people and “organisational will”
- Lack of understanding of aspects, risks and compliance obligations – often a narrow focus
Q & A

• Any questions?