EMS Tool 4
Assigning Impacts to Aspects & Determining Significance

Instructions:

**Step One** is the association of each aspect to a specific impact

1. Transfer all of the Environmental Aspects for one selected Activity from completed EMS Tool 3 onto Tool 4. You will prepare a separate Tool 4 for every Activity.
2. Identify a specific Impact for each Aspect

   **Note:** If more than one Impact exists for a specific Aspect you must redefine the Aspect so that there is only one Impact (this makes the evaluation of significance much easier)
3. In determining the Environmental Impact associated with each Aspect note the impact category into which it falls. Impacts will fall into one of four categories:
   - **Resources:** consumption of natural resources; i.e. water, energy, materials, land
   - **Air:** potential degradation of air quality
   - **Water:** potential degradation of water quality
   - **Land:** potential land contamination
4. Use the table headings to list the Impact of each Aspect for the given activity

**Step Two** is the determination of Aspect/Impact Significance

5. For each Aspect/Impact answer the ‘questions for significance’ Yes or No
6. Once the questions have been answered for each Aspect/Impact, determine if the Aspect/Impact is significant by apply the significance guidance, see attached
7. Use the Tool 4 Table to record the results of your evaluation
8. Assign each completed table a distinct document number, e.g., AIE001

See Guidance and Examples attached:
ISO 14001 definition of Impact:

“Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products or services.”

<table>
<thead>
<tr>
<th>Example: ASPECT</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy use</td>
<td>Consumption of natural resources</td>
</tr>
<tr>
<td>Wastewater production</td>
<td>Potential degradation of water quality</td>
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<tr>
<td>Fugitive air emissions</td>
<td>Potential degradation of air quality</td>
</tr>
<tr>
<td>Use of paper products</td>
<td>Consumption of natural resources</td>
</tr>
<tr>
<td>Disposal of solid waste</td>
<td>Potential land contamination</td>
</tr>
</tbody>
</table>

Example: Relationship between Activities, Aspects and Impacts:

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>ASPECTS</th>
<th>IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office support</td>
<td>Storm water</td>
<td>Potential land contamination</td>
</tr>
<tr>
<td>Construction</td>
<td>Electricity purchase</td>
<td>Resource consumption</td>
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<tr>
<td>Chemical handling</td>
<td></td>
<td></td>
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<tr>
<td>Land management</td>
<td>Disposal of used oil in vehicle maintenance</td>
<td></td>
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<td>Materials Mgmt.</td>
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<td>Support Operations</td>
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<tr>
<td>Maintenance</td>
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</table>

Each unique combination of activity/aspect/impact is then evaluated to determine significance.

**Note:** There is considerable flexibility within ISO 14001 regarding the evaluation of significance. The criteria selected should reflect the organization’s judgment regarding what is important. Therefore ensure criteria result in identifying as significant those aspects and impacts which are important to your organization. After applying the evaluation criteria to several activities, review results to see if adjustments are needed.
KEY NOTE: The significance process defined here and outlined in the attached flowchart is an example of a significance process. You are welcome to use this process but are also free to develop your own process provided it satisfies your needs and ensures that all regulated Aspects are counted as significant!

Is it regulated?

Yes: if it is regulated at the federal, state or municipal level
No: if it is not regulated
Future: if there is knowledge of pending regulations based on the stakeholder analysis

Does the aspect pose a potential environmental impact?

Yes: if the aspect is known to create environmental impacts or is likely to create impacts; severe consequence to environment
No: if the aspect is not known to create environmental impacts or has negligible consequence to environment
Unknown: if there is insufficient knowledge about the potential for the aspects to create environmental impacts

Is there significant stakeholder interest?

Yes: high potential for concern documented and expressed by several stakeholders
No: no or little concern
Unknown: if there is insufficient knowledge about the level of stakeholder concern

Is there significant financial opportunity or risk?

Yes: costs to currently manage the aspect is significant or potential to create significant cost savings exists
No: currently little or no cost to manage the aspect; little to no potential for cost savings or revenue generation
Unknown: potential for cost savings or revenue generation or costs to manage the aspect is unknown

Is it a significant aspect? Each municipality should make this determination themselves, examples include:

Yes: 1) if the aspect is regulated; and 2) if the answer is Yes for at least two of the other three questions.
No: 1) if not regulated; and 2) only 1 of the other questions to answer is a Yes

In situations where most or all of the answers are Unknown (or Future) – additional information gathering may be necessary.
Environmental Management Systems Toolbox

Aspect and Impact Evaluation

Is it regulated?

YES

1. Does the Aspect pose a potential environmental impact?
2. Is there significant stakeholder interest?
3. Is there significant financial opportunity or risk?

Determination of Significance based on your evaluation criteria

NO

Is it regulated?

YES

No further action required at this time

NO

Evaluate the existing EMS controls (objectives, targets, programs)

Are the EMS controls adequate?

YES

Document and maintain per ISO 14001 EMS standard

NO

Consider establishing objectives, targets and programs
## Tool 4: Assigning Impacts to Aspects & Determining Significance

Municipality: ____________________________
Prepared by: ____________________________
Date: ____________________________
Activity: ____________________________

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Impacts</th>
<th>Questions for Significance</th>
<th>Is it a significant aspect?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Air</td>
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<td>Land</td>
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**Note:** Aspects are significant if they are regulated and based upon your own established evaluation method.