

# ISO 14001:2004 Aspects And Impacts



# Overview

- 1. Definitions of aspect, impact, significant aspect**
- 2. Recognize importance of significant aspects to the EMS**
- 3. Learn about aspects identification**

# Prevention rather than corrective

- **Manage “how” the business interacts with environment**
- **Rather than manage “what” the business has done to the environment**
- **EMS is built around**
  - **identifying,**
  - **prioritizing,**
  - **controlling, and**
  - **improving upon, those elements of the organization that interact with the environment**

# Benefits

- **Prompts organizations to identify issues not typically managed; particularly non-regulated issues**
- **Integrates environmental issues into operations**

# Definitions

- **Aspect:**

**“Element of an organisation’s activities or products or services that can interact with the environment.”**

- **Impact:**

**“Any change to the environment, whether adverse or beneficial, wholly or partly resulting from an organization’s environmental aspects.”**

# Example

| Activity,<br>Product,<br>Service | Aspect            | Impact                        |
|----------------------------------|-------------------|-------------------------------|
| Boiler                           | Water consumption | Natural resource<br>depletion |
|                                  | Fuel consumption  | Natural resource<br>depletion |
|                                  | Air emission      | Air pollution                 |

# Step 1: Identify Aspects

- **Select an activity, a product or service**
- **Identify as many environmental aspects as possible associated with the selected activity, product or service.**
- **Identify as many actual and potential, positive and negative, environmental impacts associated with each identified aspect.**

# What do aspects look like?

- **Aspects include:**
  - **Emissions to air**
  - **Emissions to water**
    - Surface and groundwater
  - **Solid Waste disposal / land contamination**
  - **Raw material / natural resource use**
    - Energy, water, chemicals, lumber, etc.
  - **Local environmental / community issues**
    - noise, odour, land use, appearance, etc.

# What aspects are not!

- **Improve air quality – this is an objective**
- **Vehicle maintenance – this is a activity**
- **Water pollution – this is an impact**

# Where to find information?

- **Process flow diagrams**
- **Interviews with supervisors, managers, staff**
- **Hazardous material inventories**
- **Hazardous waste records**
- **Records from emergency planning, accident reports, emergency incidents**
- **Water and energy consumption records**

## Step 2: Determine Significant Aspects

- Significant aspect is one that has or can have a significant impact on the environment
- Criteria for significance rating and cut-off value
- Significance can be determined by numeric cut-off value or subjective assessment based on yes/no answers

# Why significant aspects and impacts?

- **ISO 14001 uses significant aspects and impacts as basis for developing objectives and preparing programs.**
- **Once significant, the EMS must address the aspect.**

# Aspects and Impacts Understanding

- Be comprehensive
- Do not pre-judge!
- Sort by activity, product, or service; and identify impacts
- “Aspect” is considered significant although environmental impact is used to make significance determination
- Aspects not considered significant will not be carried through the system
- Significant aspects affect and drive all other parts of system! “If you must control, it must be significant”.

# Process Flow

