

Risk-Based Thinking

in

ISO 14001:2015

Risk Management / Analysis of Risk

Risk Management

Every version of the ISO 14001 standard has advocated risk management and risk avoidance, but it has been implicit.

The new ISO 14001:2015 standard explicitly expects organizations to identify and address risks affecting compliance of products and services, resulting in improved environmental performance.

Besides identifying the risks, the new ISO standard expects organizations to address opportunities for improvements and corrective actions based on the risk analysis.

Note that while corrective action is a requirement of ISO 14001:2015, the concept of preventive action is expressed through a risk-based approach where risks are determined and actions to address risks and opportunities are taken.

The standard does not require you to create a formal risk management system. However, this risk analysis exercise is intended to outline several approaches / options for the management of risk at your company.

To prepare for the change, it is time to begin understanding Risk Based Thinking and begin looking at your processes in terms of risks.

Risk is the possibility of an event or activity negatively impacting the operational or strategic objectives of an organization.

When evaluating risk, it is helpful to address it using two (2) metrics or parameters:

- 1. Severity (if harm happens, how serious is the event)
- 2. Likelihood (what is the probability of a harmful event)

Because this topic is so important, it will have an impact on your EMS.

Risk-Based Thinking

The new ISO 14001:2015 covers Risk in a number of sections (e.g. 6.1, 6.1.1, 6.1.4, 6.2.1). The objective of the emphasis on risk is to have the organization, through its EMS, address uncertainty in processes that will affect the environmental performance at your company.

When addressing risk in your Environmental Management System, be sure that you look beyond determining the "chance" that something happens to "the effect of an uncertainty" on your business and EMS objectives.

There are five (5) attributes to enhance risk management:

- 1. An organization should accept accountability for their risks and develop comprehensive controls and risk abatement strategies.
- 2. Risk management should be a part of an organization's continual improvement strategy. Organizations should set performance goals and then review and modify processes as required. An organization should review and modify its systems, resources and capability / skills to ensure continual improvement.
- 3. Identify and train individuals with accountability for risk management. These individuals should have appropriate skills, have adequate resources to check and improve controls, monitor risks, and have the ability to communicate effectively with all the interested parties / stakeholders.
- 4. Decision making within the organization should include consideration of risks and the application of the risk management process where appropriate.
- 5. Maintain consistent and periodic reporting to all interested parties of the organization's risk management performance.

Exercise - Conduct Risk Analysis - Risk Management Worksheet - Basic Method

The first 6 columns of this form are used to list the Potential Risks and Assess the Significance of the Risks

The last 2 columns of this form are used to indicate whether or not the Item / activity / process are at risk and require attention.

*** Where both the Severity and the Likelihood are high, the risk is significant and the Item requires corrective action.

Item Needing Attention	What is present or could be introduced as a risk?	Description of Risk	Risk Assessment 1 = Severity 2 = Likelihood 3 = Significance			Does a next step in process eliminate the risk?	What controls exist to address the risk?	process step at risk? Yes / No	Initiate Remedial Action
*	Aspect		*** Impact		ict			Threat	Opportunity
			1	2	3	Justifications			

Compiled by Management representative: _	,	, Date:	
Environmental Steering Team review: 1	, Date:	, 2	, Date:

^{*} Refer to the Initial Environmental Worksheet.

Exercise - Conduct Risk Analysis - Risk Management Worksheet

ACTION	ACTION	ACTION	ACTION		ON	ACTION	ACTION	ACTION	ACTION
1	2	3	4			5	6	7	8
Item Needing Attention	What is present or could be introduced as a risk?	Description of Risk	Risk Assessment 1 = Severity 2 = Likelihood 3 = Significance			Does a next step in process eliminate the risk?	What controls exist to address the risk?	Is the Item / process step at risk? Yes / No	If YES, Initiate Remedial Action
*	Aspect		*** Impact		oact			Threat	Opportunity
			1 2 3			Justifications			