

**Environmental Monitoring and Modelling** 





# **Environmental Monitoring and Modelling**

REF: S1498 DATE: 29 September - 3 October 2024 Venue: Online - Fee: 2250 Euro

#### Introduction:

This training program typically focuses on equipping participants with the skills and knowledge necessary to assess and predict environmental changes using scientific data and computational modeling techniques. Through it, participants learn how to effectively monitor environmental parameters and utilize modeling tools to simulate and forecast environmental scenarios.

## **Program Objectives:**

#### At the end of this program, the participants will be able to:

- Identify various types of environmental aspects and assess their corresponding environmental impacts effectively.
- Demonstrate a comprehensive understanding of the requirements outlined in the newly revised ISO 14001:2018 standard.
- Analyze waste streams within their organization and identify opportunities for cost reduction through waste minimization strategies.
- Apply environmental management system EMS concepts and guidelines to establish and maintain effective environmental management practices.
- Implement the phases of EMS implementation, utilizing best-practice techniques, tools, and integration strategies with other environmental programs to achieve continual improvement in environmental performance.

# Targeted Audience:

- · Production and Process Engineers.
- Maintenance Engineers.
- People who are involved in the managing and purchasing of hazardous substances.
- Managers, Supervisors, and Consultants who will be part of an Environmental Management Systems Implementation Team.
- Anyone involved in the implementation, maintenance or supervising of an ISO 14001.

# **Program Outlines:**

Unit 1:



#### Introduction to Environmental Management:

- Benefits of Good Environmental Management.
- Key Environmental Management System EMS Elements.
- Document Framework for an Environmental Management System.
- Environmental Management System as a Process Plan / Do / Check / Act.
- ISO 14001:2018 Environmental Management System Benefits.
- ISO 14001:2018 Requirements.
- Understanding Organisation S Activities and Interested Parties.

#### Unit 2:

#### Environmental Management Systems / Leadership and Planning:

- · Initial Environmental Review IER.
- Developing and Communicating an Environmental Policy.
- · Assigning Organisational Roles, Responsibilities, and Authorities.
- Determining the Organisation S Compliance Obligations.
- Selecting Risk Control Measures for Managing Significant Impacts.
- Setting Environmental Objectives and Programs to Achieve Them.

#### Unit 3:

#### **Environmental Aspects & Impacts:**

- Identifying and Analysing Environmental Aspects and Impact Risks.
- Understanding Environmental Impacts.
- Understanding Global, Regional and Local Environmental Issues.
- How to Determine Significant Environmental Aspects.
- Analysis of Impacts, Carrying out an EIA.
- Identifying Applicable Regulatory and Standards Requirements.



#### Unit 4:

### Support and Operations:

- Awareness.
- Communication.
- Documented Information.
- Operational Control.
- Contractor & Supplier Controls.
- Emergency Preparedness and Response.

#### Unit 5:

### Performance Evaluation and Internal Environmental Auditing:

- Carrying Out an Environmental Audit.
- EMS Performance Monitoring, Measurement, Analysis, and Evaluation.
- Checking and Evaluation of Compliance Obligations.
- Management Review Process.