HSE280
AIR POLLUTION CONTROL
And Modeling in Petrochemical Industry

Course Introduction:

Since individual refineries and petrochemical facilities are uniquely configured, the techniques, which comprise a collection of operational, equipment and procedural actions, may not be applicable to every site. To better understand emission impacts, both ambient air quality monitoring and modeling is used. Dispersion modeling is sometimes conducted on specific emission sources to evaluate off-site potential concentrations.

Course Objectives:

To assist delegates:

- in addressing the implications of International Environmental Protocols
- in reviewing their air emission and waste disposal practice in the context of growing environmental awareness
- in obtaining performance improvement through the implementation of an environmental management system
- in forecasting emissions scenarios and developing specific control performance and good practices
- in auditing an inventory and computer and other air emission modeling
- by providing options for delegates in developing their organization's air and waste management practice

Who Should Attend?

- Health, Safety and Environmental professionals
- Staff responsible for setting up Air and Waste Management Systems
- Staff wishing to reduce risk and liability for their organization through sound air emission management practices, principles and procedures

Course Outline:

Pre-Test

Module 1. Environmental Concerns and Issues in oil, Gas, and Petrochemical Industry

- Marine Pollution
- Land Pollution
- Ground Water Pollution

- Industrial Waste Management

Module 2. Fundamentals of Environmental Impact Assessment (EIA)

- Screening & Scoping
- Description of the proposed development
- Description of the likely significant impacts
- Description of mitigation measures

Module 3. National Ambient Air Quality Standards (NAAQS)

- Air pollution emission plumes
- Air pollution dispersion models
- Air pollutant emission
- Characterization of atmospheric turbulence

Module 4. Air Pollution Monitoring

- Emission Factors
- Measurement
- Modeling
- Monitoring

Module 5. Atmospheric Dispersion Modeling

- AERMOD Modeling System
- Dispersion Modeling
- Photochemical Modeling
- Receptor Modeling

Module 6. Developing Biodiversity Action Plans for the Oil and Gas Sector

- What is a Biodiversity Action Plan (BAP)?
- Deciding if a BAP is mandatory, necessary or recommended
- Preparing and Implementing a BAP
- Stakeholder engagement and partnerships for biodiversity

Summary/ Conclusion of the course

Post Test

Distribution of Certificate

Course Certificate:

International Center for Training & Development (**ICTD**) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per the course location. This rate includes participant's manual, Hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee/Tea
08:20 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:30	Recess (Prayer Break & Lunch)
13:30 - 15:00	Last Session