

# PIPELINE CORROSION INTEGRITY MANAGEMENT



**FMC245**  
**Facility Integrity,**  
**Inspection,**  
**Metallurgy and**  
**Corrosion**  
**Engineering**

## **COURSE TITLE**

# **PIPELINE CORROSION INTEGRITY MANAGEMENT**

## **COURSE DATE/VENUE**

19 – 23 October 2020

London, UK

## **COURSE REFERENCE**

FMC245

## **COURSE DURATION**

05 Days

## **DISCIPLINE**

Facility Integrity, Inspection, Metallurgy and Corrosion Engineering

## **COURSE INTRODUCTION**

Pipeline is the most reliable, efficient, safe and economic mode of transport for oil, gas, hydrocarbons and water. Pipeline corrosion can result in huge monetary losses and create safety hazards for people, assets and environment. Hence, Corrosion control is an important facet for ensuring integrity of the pipelines. PCIM needs to be followed to ensure safety and reliability of the oil and gas pipelines through a foundation of corrosion control, inspection, assessment, mitigation and communication. This course covers various aspects of corrosion of pipelines, methods available for prevention and cost effective life extension of existing pipeline while maintaining adequate safeguards for human life and the environment.

## **COURSE OBJECTIVE**

The aim of the course is to provide attendees with a common awareness of Pipeline Integrity Management and also the tools and techniques for producing integrity management plans. At the end of the course trainees should be able to:

- Understand how pipeline data is integrated and gathered in database structures;
- Identify the key pipeline degradation mechanisms and threats to pipeline integrity;
- Understand the principles of risk assessment and be able to conduct a simple risk assessment;
- Develop simple Pipeline Integrity Management plans;
- Select and apply appropriate inspection and assessment criteria for pipeline defects;
- Recommend appropriate Non Destructive Testing and repair methods for pipeline defects;
- Appreciate the industry software available for the management of pipeline integrity.

## **COURSE AUDIENCE**

**The course is suggested for Electrical Engineers**

1. Electrical Technicians
2. Power System Engineers
3. Electrical Engineers
4. Consulting Engineers
5. Project Engineers
6. Power System Technicians
7. Electrical Contractors

## **COURSE CONTENT**

### **Day One**

Section one - Pipelines systems

Section two- Pipeline hazardous and toxic services

Section three - Impact of corrosion of pipelines

Section four - Pipeline system failures

Section five - Hazard identifications

Section six - Pipeline safety

### **Day Two**

Section seven - Pipeline integrity management

Section eight - Regulations

Section nine- Implementing codes and standards

Section ten - Defects & Threats  
Section eleven - High Consequences Areas  
Section twelve - Hazard identifications

### **Day Three**

Section thirteen - Pipeline failure rates  
Section fourteen - Failure mode analysis  
Section fifteen - Failure consequences  
Section sixteen - Risk assessments  
Section seventeen - Assessment intervals

### **Day Four**

Section eighteen - Baseline assessment plan  
Section nineteen - Integrity assessment  
Section twenty - Corrosion Monitoring  
Section twenty one - Fitness for purpose

### **Day Five**

Section twenty-two - Responses and mitigations  
Section twenty-three - Repair methods  
Section twenty-four - Assessment of remaining strength  
Section twenty-five - Pipeline integrity management program (PIMP)  
Section twenty-six - Incident investigation  
Section twenty-seven - Continual improvement

## **COURSE CERTIFICATE**

**TRAINIT ACADEMY** will award an internationally recognized certificate(s) for each delegate on completion of training.

## **COURSE FEES**

\$6,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

## **COURSE METHODOLOGY**

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development

of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions

