PIPELINE CORROSION INTEGRITY MANAGEMENT

TRAINIT ACADEMY

COURSE TITLE

PIPELINE CORROSION INTEGRITY MANAGEMENT

COURSE DATE/VENUE

12 - 16 July, 2021

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 1

Section 1 - Pipelines systems

Section 2- Pipeline hazardous and toxic services

Section 3 - Impact of corrosion of pipelines

Section 4 - Pipeline system failures

Section 5 - Hazard identifications

Section 6 - Pipeline safety

Day 2

Section 7 - Pipeline integrity management

Section 8 - Regulations

Section 9- Implementing codes and standards

Section 10 - Defects & Threats

Section 11 - High Consequences Areas

Section 12 - Hazard identifications

Day 3

Section 13 - Pipeline failure rates

Section 14 - Failure mode analysis

Section 15 - Failure consequences

Section 16 - Risk assessments

Section 17 - Assessment intervals

Day 4

Section 18 - Baseline assessment plan

Section 19 - Integrity assessment

Section 20 - Corrosion Monitoring

Section 21 - Fitness for purpose

Day 5

Section 22 - Responses and mitigations

Section 23 - Repair methods

Section 24 - Assessment of remaining strength

Section 25 - Pipeline integrity management program (PIMP)

Section 26 - Incident investigation

Section 27 - 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