



# LOPA: Layers of Protection Analysis

## TRAINING ON LAYERS OF PROTECTION ANALYSIS

DURATION : ONE DAY

Time Schedule 8.30 a.m. to 4.30.p.m.

OBJECTIVES:

Provide an understanding on the following:

- Risk management Principles
- Concept of risk reduction by protection systems
- Allocation of risk reduction for protection layers and LOPA method
- Identification of Independent protection layers
- Risk tolerance criteria selection
- Assignment of safety integrity level by LOPA method
- Role of participants in LOPA

*Session: 1*

- Introduction to Risk Management
- Risk reduction by protection systems
- Risk Criteria

*Session: 2*

- Hazardous events
- Enabling conditions, Condition modifiers
- Initiating event frequency

*Session: 3*

- Independent Protection Layers
- LOPA Method
- Consequence Analysis

*Session: 4*

- Multiple LOPA Practice Examples
- Role of LOPA participants