LOPA Training Abu Dhabi

Service Objectives

A practical, Abu Dhabi-focused programme that builds defensible Layer of Protection Analysis (LOPA) capability aligned with local regulatory and operator expectations.

- Develop consistent, auditable LOPA scenarios and documentation.
- Align with ADNOC expectations and the OSHAD framework (via ADPHC).
- Quantify risk reduction using realistic data; compute RRF, PFDavg, and map to SIL targets per IEC 61511.
- Validate IPL independence, effectiveness, and proof-test coverage; avoid double counting.
- Bridge HAZOP findings to quantitative decisions that inform MOC, capital planning, and audits.
- Standardise language across engineering, operations, and management for faster approvals.

> Abu Dhabi casework includes refining, gas processing, tank farms, utilities, and terminals (e.g., gas dehydration units, amine sweetening, LPG bullets, jet fuel terminals).

Who This Service Is For

- HSE managers, process safety specialists, and technical authorities who close out HAZOPs with quantified decisions.
- Plant managers, discipline leads, and process engineers seeking consistent, defensible safeguard justifications.
- Operations and maintenance teams evaluating bypasses, overrides, and proof-test strategies.
- Compliance officers preparing for OSHAD/ADPHC and Civil Defence reviews.
- EPC contractors and system integrators needing IPL independence and SIL target justification during design and MOC.
- Operators across ADNOC assets, KIZAD chemical terminals, and industrial clusters around Mussafah/ICAD and Al Dhafra/Ruwais in hydrocarbon processing, petrochemicals, power, storage terminals, and utilities.

Duration & Process Overview

- Delivery formats: on-site at your facility, neutral classroom in Abu Dhabi, or live online; blended options available.
- Typical durations: Foundation 1 day; Practitioner 2 days; Blended 6–8 hours pre-work + 1 day on-site.
- Cohort size: 8–16 participants; prerequisites: experience with HAZOP and basic process safety.
- Pre-course needs analysis and document intake; assessment with quizzes and a capstone; certificate of completion; refresh every 24–36 months or upon major changes.

Methodology

A modular approach combining short lectures and Abu Dhabi-relevant casework, moving from scoping through hands-on practice to certification.

Phase	Objective	Deliverable / Duration
Pre-course scoping & intake	Align on risk criteria and tailor scenarios using site documents (risk matrix, HAZOP reports, corporate LOPA standard).	Agreed scope, tailored case list, schedule.
Foundation module	Revisit HAZOP-to-LOPA flow; LOPA sheet structure; enabling conditions and conditional modifiers; link to site tolerability criteria.	Baseline competence; sample scenarios. 1 day.
Practitioner workshops	Deep dive on IPL independence/effectiveness, proof-test intervals/coverage, SIF architecture (for target-setting), and avoiding double counting.	Completed case studies with validated assumptions. 2 days.
Blended option (if selected)	Virtual pre-learning to minimise downtime; on-site workshop to finalise site scenarios.	6–8 hours pre-work + 1 day workshop.
Assessment & feedback	Quizzes, hands-on casework, and a capstone team exercise with structured feedback.	Individual and team feedback summary.
Certification & handover	Document outcomes and confirm scope; organisation retains any statutory/internal competency sign-off.	Certificate of completion with content and hours.

Pre-course scoping & intake

- Collect risk matrix, sample HAZOPs, and corporate LOPA standards to tailor scenarios.

Foundation module

- Establish terminology, boundaries, and scenario selection consistent with site risk criteria.

Practitioner workshops

- Validate IPL claims, proof-test strategies, and dataset choices using Abu Dhabi-relevant cases.

Blended option

- Virtual pre-work accelerates on-site consolidation and finalisation of site scenarios.

Assessment, certification & handover

- Capstone LOPA case with feedback; certificate issued by NPM with scope and hours recorded.