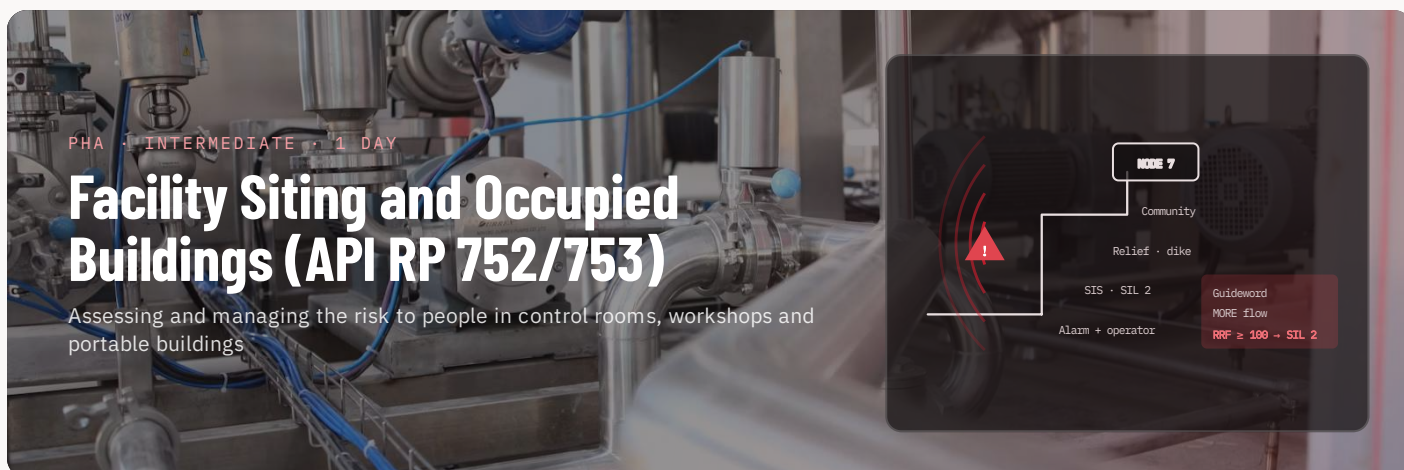




DURATION
1 day

LEVEL
Intermediate

FORMAT
On-site classroom · virtual instructor-led

LANGUAGE
English

MAX. PARTICIPANTS
16

1
siting study on your plot plan

3
hazard types: explosion · fire · toxic

1
building risk register

◆ Overview

Texas City put facility siting on every refinery's agenda; API RP 752, 753 and 756 tell you how to do it, but not how to make the decisions. The course covers identifying occupied buildings, selecting the explosion, fire and toxic scenarios, applying consequence-based, risk-based and spacing-table approaches, and deciding what to do when a building fails the criteria: relocate, strengthen, reduce occupancy or accept. A siting study is carried out on the participants' own plot plan.

◆ Learning outcomes

- Identify buildings in scope and classify them by occupancy and function
- Select credible explosion, fire and toxic scenarios for a siting study
- Apply consequence-based, risk-based and spacing-table approaches and know their limits
- Interpret overpressure, radiation and toxic contours against building damage levels
- Evaluate portable and tent buildings under API RP 753 and 756
- Produce a building risk register with prioritised, defensible actions

◆ Who should attend

Process safety engineers, plant layout and civil engineers, project managers, facilities and HSE staff responsible for occupied buildings

◆ Course outline

MORNING

Lessons from Texas City and Flixborough · API RP 752, 753 and 756 scope and criteria · building inventory and occupancy · scenario selection for explosion, fire and toxic · building damage levels and occupant vulnerability

AFTERNOON

Consequence-based versus risk-based approaches · siting study on the participants' plot plan in CeraImpact · mitigation: relocation, blast-resistant design, occupancy limits · portable buildings and temporary structures · building risk register and management of change

◆ Standards referenced

API RP 752 API RP 753 API RP 756

CCPS Guidelines for Evaluating Process Plant Buildings

ASCE Design of Blast-Resistant Buildings in Petrochemical Facilities

◆ Tools & exercises

Siting study run in CeraImpact on the participants' georeferenced plot plan

◆ What's included

- ✓ Course manual and slide pack
- ✓ Software access for the course
- ✓ Post-course Q&A with the instructor
- ✓ Exercise and case-study pack
- ✓ Competency quiz and certificate
- ✓ Templates used in the exercises

PREREQUISITES

Consequence Modelling Fundamentals (TR-B01) or equivalent

CERTIFICATION

Certificate of completion

INSTRUCTORS

Practising engineers — TÜV HAZOP Leader, CCPSC and IEC 61511 Functional Safety certified — with 200+ years of cumulative plant experience.

Book this course or build a custom curriculum

On-site at your plant or virtual · in-house groups · competency assessment included

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