



# TECHNICAL SAFETY

A COMMITMENT
TO PEOPLE, EFFICIENCY,
AND QUALITY



Whether you need a single study, a suite of formal safety assessments, or an integrated technical safety program, EDG offers a range of scalable, tailored technical safety solutions that can be applied to your plants and facilities to identify hazards and mitigate risk. Our offshore expertise includes production units & topsides for all types of floatings and fixed installations. EDG's onshore expertise includes terminals, pipeline facilities, refineries, and chemical plants.

Our HAZARD IDENTIFICATION and CONSEQUENCE ANALYSIS services consists of tailored solutions to meet your safety needs. Client's utilize EDG's indepth knowledge of facility design to help identify risks, evaluate safeguards, and communicate risk scenarios through our HAZID, HAZOP, LOPA, and Bowtie Analysis services. Leverage the experience of our team of experts to evaluate your current process safety management systems, procedures, and practices against industry best practices. We also work with our clients in the development of key asset and risk registers, safety critical elements, and performance standards.

Once hazards have been identified, risks can be further mitigated through our **FIRE PROTECTION** design services. EDG's experience in **HUMAN FACTORS ENGINEERING** also helps integrate the human factor into the design and operation of a facility.



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# SERVICES AND CAPABILITIES

#### HAZARD IDENTIFICATION

- HAZID
- **HAZOP**
- LOPA
- **Bowtie Analysis**
- Process Safety Management

# **CONSEQUENCE ANALYSIS**

- Facility Siting Sutdy (API 752)
- Coarse Fire Risk Analysis
- Coarse Explosion Risk Analysis
- Flare Radiation
- Fire Risk Analysis using CFD
- Explosion Risk Analysis using CFD
- Turbine Exhaust Study CFD
- Dropped Object Analysis
- Quantitative Risk Analysis
- Escape, Evacuation, & Rescue Analysis

### **FIRE PROTECTION**

- Fire Protection Philosophy
  - Active & Passive Fire Protection Systems
- Firewater Deluge System Design
  - Includes Detailed Hydraulic Calculations
- Package Engineering
- Fire Protection & Safety Equipment Layout
- Source of Release Schedule
- Hazardous Area Classification
- Fire and Gas Detection Design
- Fire and Gas Mapping Study

## **HUMAN FACTORS ENGINEERING**

- Developing Human Factors Philosphy & Implementation Plan
- Valve & Criticality Assesments
- Desicion Support for Design & Operations Activities

TRUST EDG TO ASSESS, DEVELOP, AND IMPROVE YOUR SAFETY MANAGEMENT SYSTEM PROGRAMS. ALLOW US TO PREDICT AND MITIGATE YOUR RISK WHILE PROVIDING YOU WITH THE MOST UP-TO-DATE SAFETY AND REGULATORY GUIDANCE.



To learn more about how EDG's Technical Safety Team can help execute your next successful project or facility assesment, give us a call or visit our website for more information.

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