

## Process Safety Management System

"Process Safety" manages proactive measures to ensure the integrity of the enterprise through good design principles, engineering, maintenance and operating practices. It aims to prevent the release of hazardous substances and is concerned with the prevention and control of incidents that have the potential to release hazardous substances or energy. Such events can cause toxic effects, fire or explosion and ultimately cause loss of life, serious injuries, property damage, loss of production and environmental impact.

In history, accidents due to process safety violations in industrial facilities (fire, explosion and toxic gas emission) have led to large-scale loss of life and property and have revealed the importance of process safety. Flixborough (1974), Seveso (1976), Bhopal (1984), Piper Alpha (1988) and Buncefield (2005) are prime examples of preventable disasters in the chemical and hydrocarbon process industries.

SOCAR Turkey has a culture that adopts best industry HSE practices, which forms the basis for ensuring excellence in occupational health and safety and environmental management. The Process Safety Management System carried out at SOCAR Turkey, where the vision of being a reliable, sensitive to life and nature, innovative company in the industry is adopted, consists of the following topics:

- Process Safety Governance and Organization
- Performance Management and Continuous Improvement
- Operational Discipline
- Audits
- Process Safety Leadership Coaching
- Process Safety Culture and Capability Building Program
- Process Safety Information (PSI; Process and Equipment Design Information, P&ID etc.)
- Process Hazard Analysis (What-if Analysis, HAZOP&LOPA etc.)
- Process Safety Change Management (MOC; Technology & Facilities)
- Pre Start-up Safety Review (PSSR)
- Operating Procedures
- Incident Investigation and Reporting
- PSM Learning and Competency
- Emergency Response and Planning

The Process Safety Management Project, which is being undertaken at Star Refinery, Petkim and Storage Facilities, aims to prevent major industrial accidents and improve HSE performance and HSE culture by reducing their impact. Industry best practices in process safety are integrated into SOCAR Turkey processes.