Overview of HSE Best Practices for Petroleum Industry Personnel

Overview
This workshop presents a comprehensive overview of the field of Health, Safety, and the Environment (HSE) in the modern petroleum industry and discusses how HSE management programs and procedures are a crucial aspect of companies that operate in the industry. The program consists of a careful balance of lectures by a recognized industry specialist and group exercises, readings, and discussions of case studies and scenarios. This blended learning format has proven to be the best way for participants to internalize the lecture content in a challenging and enjoyable team-based environment. In the process, attendees learn the complexities and challenges of developing and maintaining a robust HSE system in large organizations as well as developing an HSE-focused culture that helps to ensure safe and sustainable operations. Secondary benefits include extensive participant networking, team leadership development, decision-making skills, and experience in making formal presentations.

Key Benefits
Upon completing this program, you will understand:
- The role of HSE best practices in the petroleum industry.
- How to assess risk and how to implement risk management systems.
- The value of HSE management systems.
- How an HSE culture improves safety and drives value in an organization.
- Emergency response planning, implementation, and post-incident investigation and reporting.
- The roles of sustainability and social responsibility.
- The costs of failing to implement and maintain HSE systems and procedures in an organization.

Who Should Attend
This program is ideal for those individuals who seek an understanding of HSE best practices in the international petroleum industry. This includes managers, planners, government personnel, technologists and engineers, field supervisors, contractors, support staff, and other specialists in the industry. It is also beneficial to those who interface with the oil and gas industry and those who work in other areas wishing to learn about this important component of the energy industry.

Program Location and Schedule
Daily sessions will start at 8:00 AM and run until 5:00 PM. Participants will receive further information on location and schedule upon registration.

Instructional Format
The instructional format consists of a balance of lectures by a seasoned industry expert and practical case studies, discussions, and group exercises. The lectures will address the complexities and challenges of HSE management in the petrochemical, oil and gas, and refining business, and all of the key considerations in developing a sound investment and operating plan that maintains long-term competitiveness.

The case studies and group exercises allow participants to investigate HSE topics in more detail and apply the learnings from the lecture presentations. Examples are taken from actual petroleum industry incidents and occurrences, and allow the participants to critically analyze the issues and impacts of these incidents. In addition, group exercises will directly address situations that are commonly faced in petroleum industry operations. The analysis and discussion of real-world events will provide the attendees with a deeper understanding of the nature of HSE issues in the petroleum industry and ways to address them in their own organizations.
Overview of Petroleum Industry Risk Management
Introduction and definition of risk management, forms of risk management in the petroleum industry, elements of risk management programs.

Operations Risk Management in the Petroleum Industry
Examples of operations risk management, approaches to risk assessment, process risk assessments, qualitative and quantitative risk assessment methods.

Joint Venture Operations
Overview of joint ventures, partnership issues, operator and non-operator HSE involvement and roles.

HSE Management Systems
History and overview of HSE management programs, elements of HSE management systems, the role of management, management system metrics, linkage to sustainability.

Safety and Process Safety Programs
Safety vs. process safety, “hard” and “soft” safety areas of concern related to people and process safety, safe work procedures, and key operations approaches to ensure ongoing operational integrity.

Process Safety and Management Systems
Linkage of process safety to HSE management systems, management of change, safety reviews, mechanical integrity, process safety information, contractors and third party involvement.

Petroleum Industry Health Issues
Health issues in the petroleum industry, chemical and material exposure issues, causes and effects of workplace injuries, assessing health risks, health and chemical control programs.

Emergency Preparedness and Response
Emergency preparedness and response plans, response scenarios, emergency equipment, availability and maintenance, preparedness drills, emergency response command structures.

Incident Investigation Techniques and Programs
Incident investigation programs and requirements, levels of incidents and investigations, incident review and investigation techniques, reporting issues and requirements, conducting trend analysis to link with continuous improvement programs.

Environmental Issues in the Petroleum Industry
Overview and classes of environmental issues, pollutants, impacts of improper environmental management, scales of impact and time, control and treatment programs, evolution of environmental management.

Developing an HSE Culture
Developing a healthy, safe, and environmental culture in an organization, role of a safety culture in HSE management programs, individual and organizational behavioral patterns, aspects of a safety culture program, value of a safety culture, introducing a safety culture in new areas or organizations including the cost of failure when these programs are not fully implemented.

Sustainability and Social Responsibility
Sustainable operations in the petroleum industry, elements of sustainability and social responsibility programs, implementing sustainability programs, sustainability and corporate citizenship reports, sustainability indicators, social responsibility to the community.

Managing HSE Auditing
Compliance and management involvement, measuring compliance, audit programs and objectives, internal and external audits, value of audit and compliance programs.

Customization
Some modules, exercises, and class discussions can be customized to support your organization’s needs.
- Increased focus on a specific petroleum industry segment
- Fine tuning to reflect field vs. headquarters type issues
- Where and when appropriate, conducting at a field site with hands-on exercises
The case studies, videos, and group exercises allow the participants to investigate HSE topics in more detail and apply the learnings from the lecture presentations. Examples are taken from actual petroleum industry incidents and occurrences and allow the participants to critically analyze the issues and effects of these incidents. In addition, group exercises allow teams of participants to directly address situations that are commonly faced in petroleum industry operations. The analysis and discussion of real-world events provide the attendees with a deeper understanding of the nature of HSE issues in the petroleum industry and ways to address them in their own organizations.

Sessions include:

- Review of HSE and sustainability planning in a joint venture operation, onshore central Africa
- Work permit review exercise
- Emergency response plan exercise
- Review and comparison of investigation reports of a major offshore incident
- Analysis of the response of a major oil company to a significant environmental issue
- Review of the development of a safety culture in a major offshore facility
- Evaluation of the sustainability reports of major international oil companies
- Video and group discussion of the investigation into a major incident at an offshore production facility
- Video and group discussion of the investigation into a major refinery incident

INSTRUCTOR

Jack Slotnick is an HSE expert in the oil industry. His career spanned more than 41 years of service with ExxonMobil Corporation, where he held a number of technical, operations, product stewardship, and management positions in various phases of operations for the company. He held several special assignments including development of an energy conservation and management program as well as preparing Mobil Oil's early corporate environmental stewardship reports. Prior to his retirement in 2011, Mr. Slotnick managed not only the Downstream and Chemical, Safety, Health, and Environmental (SHE) audit program, but also facilitated more than 200 SHE compliance and/or management system audits at offshore oil platforms, onshore drilling operations, gas recovery plants, petroleum refineries, chemical plants, and other supply and transportation operations around the world. Mr. Slotnick holds a B.S. in Chemical Engineering from Pennsylvania State University and an MBA from Drexel University. He is a Certified Environmental and Safety Auditor (CPEA) for regulatory compliance, ISO 14001, and American Chemical Councils Responsible Care Program. He currently sits on the Board of Directors for the Board of Environmental Auditor Certification (BEAC) and is a former board member for the Environmental Auditing Roundtable.