Training Course on Occupational Health and Industrial Hygiene in the Oil and Gas Industry

Professional Development Training Course Outline

Category	Oil and Gas	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Occupational health and industrial hygiene are critical pillars in ensuring workforce safety, productivity, and regulatory compliance in the high-risk Oil & Gas (O&G) sector. With increased awareness of workplace hazards, toxic exposures, and the global push toward sustainability and ESG compliance, O&G professionals must be trained to identify, assess, and mitigate health risks. Training Course on Occupational Health & Industrial Hygiene in the Oil & Gas Industry provides a robust foundation in occupational hygiene standards, advanced hazard identification techniques, and real-world applications tailored specifically to upstream, midstream, and downstream operations.

The course bridges knowledge and field application through interactive learning, modern monitoring technologies, and data-driven risk assessments. Participants will master the essentials of exposure control, health surveillance, ventilation systems, ergonomics, and incident response. Designed for HSE professionals, plant managers, and engineers, this course enhances competencies for implementing effective occupational health programs in compliance with OSHA, NIOSH, ACGIH, and international oil & gas safety regulations.

Programme Curriculum

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Course Objectives

1. Understand the principles of occupational health and industrial hygiene in the oil & gas industry.
2. Identify chemical, biological, and physical hazards in O&G operations.
3. Apply risk assessment and exposure evaluation techniques using global standards.
4. Implement exposure monitoring programs using modern industrial hygiene tools.
5. Develop effective ventilation and engineering control systems.
6. Understand personal protective equipment (PPE) selection and usage.
7. Establish occupational health surveillance and reporting programs.
8. Analyze workplace ergonomics to reduce injury risks in high-impact environments.
9. Create incident reporting and emergency response strategies for occupational illness.
10. Comply with international regulations (OSHA, NIOSH, ACGIH, ISO 45001).
11. Incorporate health data analytics for proactive health management.
12. Promote a health-first safety culture across oil and gas assets.
13. Conduct occupational health audits and hygiene inspections.

Target Audience

1. Health, Safety, and Environment (HSE) Officers
2. Occupational Hygienists
3. Safety Engineers
4. Operations Managers
5. Maintenance Supervisors
6. Industrial Engineers
7. Field Service Technicians
8. Environmental Health Professionals

Course Duration: 5 days

Course Modules

Module 1: Introduction to Occupational Health in Oil & Gas

- Overview of occupational health in high-risk industries

- Health hazards specific to upstream, midstream, and downstream sectors
- Roles and responsibilities in workplace health management
- Common occupational diseases in the O&G sector
- Legal and ethical considerations in health protection
- **Case Study**: Respiratory illness outbreak in an offshore drilling platform

Module 2: Industrial Hygiene Principles and Exposure Pathways

- Fundamentals of industrial hygiene science
- Routes of exposure: inhalation, dermal, ingestion, injection
- Hazard recognition and risk characterization
- Acute vs. chronic exposure impacts
- Exposure limit standards: TLV, PEL, REL
- **Case Study**: Chronic benzene exposure in petrochemical refining

Module 3: Exposure Monitoring and Risk Assessment

- Sampling techniques for gases, vapors, particulates
- Real-time exposure monitoring equipment
- Quantitative vs. qualitative risk assessments
- Data interpretation and report generation
- Hierarchy of controls in risk mitigation
- **Case Study**: VOC monitoring in confined space tank cleaning

Module 4: Control Measures and Ventilation Systems

- Engineering controls and substitution strategies
- Local exhaust vs. general dilution ventilation
- PPE selection and limitations
- Administrative controls and work practice policies
- Maintenance of control equipment
- **Case Study**: Dust control system failures in drilling operations

Module 5: Health Surveillance & Medical Monitoring

- Purpose and scope of medical surveillance programs
- Pre-placement and periodic health assessments
- Health records management and confidentiality
- Biological exposure indices (BEIs)
- Use of health data analytics for trend analysis
- **Case Study**: Hearing conservation program in gas processing facility

Module 6: Ergonomics in Oil & Gas Work Environments

- Ergonomic risk factors in rig and plant operations
- Manual handling and lifting analysis
- Workstation design and job rotation

- Use of ergonomic tools and PPE
- Preventing repetitive strain and musculoskeletal injuries
- **Case Study**: Back injury prevention program at an LNG facility

Module 7: Incident Management and Emergency Response

- Occupational health incident investigation process
- Emergency response planning and drills
- Communication and coordination with health responders
- Recordkeeping and reporting requirements
- Post-incident medical care and rehabilitation
- **Case Study**: Hydrogen sulfide (H?S) exposure emergency response

Module 8: Regulatory Compliance and Hygiene Auditing

- Overview of global regulations (OSHA, ACGIH, ISO 45001)
- Workplace hygiene inspections and documentation
- Occupational health audit procedures
- Compliance gap analysis
- Continuous improvement in health and hygiene programs
- **Case Study**: Regulatory non-compliance audit in offshore operations

Training Methodology

- Instructor-led interactive sessions
- Group discussions and workshops
- Real-world case study analysis
- Demonstrations using hygiene monitoring tools
- Assessments, quizzes, and feedback-based learning

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
30 Nov 2026	04 Dec 2026	Online	$1,000
30 Nov 2026	04 Dec 2026	Physical	$1,500
30 Nov 2026	04 Dec 2026	Physical	$3,000
30 Nov 2026	04 Dec 2026	Physical	$3,000
30 Nov 2026	04 Dec 2026	Physical	$6,000
30 Nov 2026	04 Dec 2026	Physical	$4,500
30 Nov 2026	04 Dec 2026	Physical	$6,000
30 Nov 2026	04 Dec 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com