

COURSE OVERVIEW HE0346-4D
Oil & Gas Firefighting Tactics

Course Title

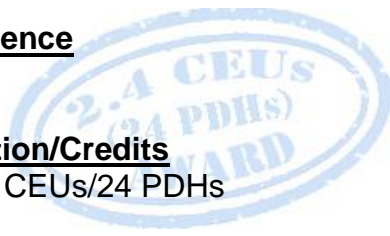
Oil & Gas Firefighting Tactics

Course Reference

HE0346-4D

Course Duration/Credits

Four days/2.4 CEUs/24 PDHs



Course Date/Venue

Session(s)	Date	Venue
1	January 08-11, 2024	Cheops Meeting Room, Radisson Blu Hotel, Istanbul Sisli, Turkey
2	April 15-18, 2024	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
3	July 01-04, 2024	Jubail Hall, Signature Al Khobar Hotel, Al Khobar, KSA
4	October 14-17, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Course Description



This practical and highly-interactive course includes practical sessions and demonstration were participants carryout firefighting tactics. Theory learnt in the class will be applied using fire equipment.



The oil and gas industry delivers significant benefits to community, providing much of the energy needed the for industrial, commercial and domestic life. A large-scale fire can expose the workers and the community to extreme danger, and can be financially devastating when the cost of destroyed equipment and lost production is tallied. Fire incidents in onshore and offshore oil and gas facilities need to be brought under control very quickly, before a minor mishap results in a major disaster.



This course is designed to provide delegates with a detailed and up-to-date overview of Oil & Gas firefighting tactics. It covers the major oil & gas emergencies including emergency types, threats, phenomena, collateral damage, event escalation, response challenges and common errors.

The course will also cover the 3-dimensional fires that includes pressure-fed fires, old methodologies, hydro-chem basics, hydro-chem techniques and review of hydro-chem capable devices.

Further, the course will discuss the tactical considerations for process and pressure-fed events; footprint principles, calculations and methodology application by event; as well as logistics in water supplies, hose deployment, foam stockpiling, mobilization, foam proportioning and distribution.

At the completion of the course, participants will be able to apply the specific tactics for bulk storage flammable liquid fires as well as the tricks of the trade using the SAFE system, piggy-backing streams, hose management, ergonomics, incident and scene management, ICS structures and proper communications.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain a good working knowledge on oil & gas firefighting tactics
- Review the major oil and gas emergencies including emergency types, threats, phenomena, collateral damage, event escalation, response challenges and common errors
- Recognize the 3-dimensional fires covering pressure-fed fires, old methodologies, hydro-chem basics, hydro-chem techniques and review of hydro-chem capable devices
- Discuss the tactical considerations for process and pressure-fed events comprising of process fires, vapour cloud control, tactical high-pressure storage areas, closed containers, pipelines and manifolds
- Describe the footprint principles and carryout calculations and methodology application by event as well as the logistics in water supplies, hose deployment, foam stockpiling, mobilization, foam proportioning and distribution
- Employ specific tactics for bulk storage flammable liquid fires
- Illustrate tricks of the trade using the SAFE system, piggy-backing streams, hose management, ergonomics, incident, scene management, ICS structures and communications

Who Should Attend

This course provides a wide understanding and deeper appreciation of oil and gas firefighting tactics for all fire officers.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Workshops & Work Presentations
- 30% Case Studies & Practical Exercises
- 20% Software, Simulators & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee


Istanbul	US\$ 5,000 per Delegate + VAT . This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Abu Dhabi	US\$ 4,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Al Khobar	US\$ 4,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Dubai	US\$ 4,500 per Delegate + VAT . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations


Certificates are accredited by the following international accreditation organizations: -

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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **2.4 CEUs** (Continuing Education Units) or **24 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Attalla Ersan, PEng, MSc, BSc, is a **Senior HSE Consultant** with over **35 years** of extensive experience within the **Project Safety Oil & Gas, Hydrocarbon** and **Petrochemical** industries. His expertise widely covers the areas of **Accident Investigation, Health & Safety, Occupational Safety & Security, Safety Risks** in Urea Plants, **Advanced Incident Investigation & Confidential Reporting, Facilities Management, Environmental Health & Safety Management, Products Specification, HSSE Performance & Effectiveness, HAZOP Facilitation, Hazardous Materials, Material Safety Data Sheets (MSDS), Hazardous Wastes, Hazards of Chemical Incidents, Shipping Configurations, Respiratory Protection, Protective Clothing, Donning and Doffing Procedures, Boiler & Steam System Management, Waste Heat Recovery, Boiler Plant Safety, Boiler Controls, Steam Distribution Systems, Steam Traps, Pollution Control, Cracked Gas Compressor, Reboilers, Sulphur Unit Air Blower, Steam Turbine, Distillation Columns, Gas Treatment, Waste & Water Treatment Units, Process Plant Operations, Process Plant Startup & Operating Procedure, Ethylene & Vinyl Chloride, Ethane Cracking Furnaces Operations, Ethylene & Polyethylene Operation, Acid Gas Treatment, Sulphur Recovery, EDC & VCM, Caustic Soda Storage, Debottle-necking, Loss Prevention, Process Operation, Safety Audits, Process Engineering, Root Cause Investigations, Pyrolysis Cracking, Gas Plant Commissioning, Loss Prevention Techniques, Occupational Hazards, Hot Tapping & Tie-Ins, Pre-Start-Up Safety Review (PSSR), Standard Operating Procedure (SOP), Emergency Operating Procedure (EOP), Permit to Work Systems (PTW), Hazard and Operability (HAZOP) Study, Process Hazards Analysis (PHA), Consequence Analysis Application, Gas Detectors Operation, Accident/Incident Investigation (Why Tree Method), Occupational Exposure Assessment, Fire Fighting & First Aid, Environmental Management, Basic Safety Awareness, Steam Cracking, Steam Generation, Binary Fractionators Operations, Tanks Farm & Metering Station Techniques, Gas Treatment, Sulphur Recovery Process Unit Operation, Permit to Work System and Emergency Response Planning.** Further, he is also well-versed in Project Management, Human Resources Consultancy, Manpower Planning, Job Design & Evaluation, Recruitment, Training & Development and Leadership, Creative Problem Solving Skills, Work Ethic, Job Analysis Evaluation, Training & Development Needs, Bidding & Tendering, Technical Report Writing, Supervisory Leadership, Effective Communication Skills and Total Quality Management (TQM). He is currently the **CEO of Ersan Petrokimya Teknoloji Company Limited** wherein he is responsible for the design and operation of Biogas Process Plants.

During his career life, Mr. Ersan has gained his practical and field experience through his various significant positions and dedication as the **HSE Field Engineer, Safety Engineer, Policy, Organization & Manpower Development Head, Training & Development, Head, Ethylene Plant – Pyrolysis Furnace Engineer, Production Engineer, HSE Advisor, Process Training Coordinator, Ethylene Plant Shift Supervisor, Ethylene Plant Panel & Fit Operator, Process Training & Development Coordinator, Technical Consultant, and Instructor/Trainer** for Qatar Vinyl Company Limited and Qatar Petroleum Company (QAPCO).

Mr. Ersan is a **Registered Professional Engineer** and has a **Master's degree of Education in Educational Training & Leadership** and a **Bachelor's degree of Petrochemical Engineering**. Further, he is a **Certified Instructor/Trainer** and has delivered numerous trainings, courses, workshops, conferences and seminars internationally.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	Registration & Coffee
0800 – 0830	Welcome & Introduction
0830 – 0930	Introduction Program Overview
0930 – 0945	Break
0945 - 1045	Review of Major Oil & Gas Emergencies Emergency Types • Threats & Phenomena
1045 - 1230	Review of Major Oil & Gas Emergencies Collateral Damage & Event Escalation • Response Challenges & Common Errors
1230 - 1245	Break
1245- 1330	3-Dimensional Fires Pressure-Fed Fires • Old Methodologies • Hydro-Chem Basics • Hydro-Chem Techniques • Review of Hydro-Chem Capable Devices
1330 - 1420	Tactical Considerations for Process & Pressure-Fed Events Process Fires • Vapor Cloud Control • Tactical High Pressure Storage Areas & Closed Containers • Pipelines and Manifolds
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2

0730 – 0930	Footprint 101 Footprint Principles • Calculations
0930 – 0945	Break
0945 – 1030	Footprint 101 (cont'd) Methodology Application by Event (Straight Chain Hydrocarbons, Alcohols & MTBE, Crude Oil High-Angle Tease)
1030 – 1230	Logistics Water Supplies • Hose Deployment
1230 – 1245	Break
1245 – 1420	Logistics (cont'd) Foam Stockpiling & Mobilization • Foam Proportioning & Distribution
1420 – 1430	Recap
1430	Lunch & End of Day Two

Day 3

0730 – 0930	Specific Tactics for Bulk Storage Flammable Liquid Fires Crude Oil • Dike Fires
0930 – 0945	Break
0945 – 1030	Specific Tactics for Bulk Storage Flammable Liquid Fires (cont'd) Fish Mouths • Collapsed Roofs
1030 – 1230	Specific Tactics for Bulk Storage Flammable Liquid Fires (cont'd) Flame Ingestion • Vent Fires

1230 - 1245	Break
1245 - 1420	Specific Tactics for Bulk Storage Flammable Liquid Fires (cont'd) Sunken Roofs
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 - 0930	Tricks of the Trade Using the SAFE System • Piggy-Backing Streams
0930 - 0945	Break
0945 - 1030	Tricks of the Trade (cont'd) Hose Management • Ergonomics
1030 - 1230	Tricks of the Trade (cont'd) Incident & Scene Management • ICS Structures
1230 - 1245	Break
1245 - 1345	Tricks of the Trade (cont'd) Communications
1345 - 1400	Course Conclusion
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Practical Sessions/Site Visit



Course Coordinator

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