



External Training Course

Flare System Operations and Environmental Compliance

From 20 Oct. To 24 Oct. 2025
From 10 Nov. To 14 Nov. 2025
From 08 Dec. To 12 Dec. 2025

The H Dubai Hotel, Dubai, UAE

Mr. Ghanem F. Al-Otaibi
GM & Institute Owner

Tel.: 00965 22248901

Fax: 00965 22204999

Mob.: 00965 65548855

Mob.: 00965 97273712

Email: admin@agi-kw.com

Email: agi-kw@hotmail.com

W/SITE: WWW.AGI-KW.COM

External Training Course:

Flare System Operations and Environmental Compliance

From 20 Oct. To 24 Oct. 2025

Fees: 1300 KD

From 10 Nov. To 14 Nov. 2025

Fees: 1300 KD

From 15 Dec. To 19 Dec. 2025

Fees: 1300 KD

Course Overview:

This specialised training course provides comprehensive knowledge and practical skills required for effective flare system operations and ensuring compliance with environmental regulations. Participants will gain an in-depth understanding of flare system design, operational best practices, emissions control, and regulatory requirements to optimise safety and minimise environmental impact.

Course Objectives:

By the end of this course, participants will be able to:

- Understand the design and function of flare systems in oil and gas facilities.
- Operate flare systems safely and efficiently.
- Identify common operational challenges and troubleshooting techniques.
- Comply with environmental regulations and emission standards.
- Implement best practices to minimise flare emissions and improve sustainability.
- Conduct flare system performance monitoring and reporting.

Training Methodology:

Interactive presentations with visual process animations.

Group discussions and operational problem-solving exercises.

Real-life case studies from refinery and petrochemical operations.

Practical troubleshooting scenarios and exercises.

Final workshop and participant action planning for their work areas.

Organisational Impact:

Improved flare system operational safety and reliability.

Enhanced compliance with environmental regulations.

Reduced flare emissions and environmental footprint.

Strengthened organisational reputation and regulatory standing.

Increased workforce competence in flare system management.

Personal Impact:

Deep understanding of flare system design and operation.
Improved skills in managing flare emissions and environmental compliance.
Enhanced troubleshooting and maintenance capabilities.
Greater confidence in flare system oversight and reporting.
Strengthened professional profile in environmental and process safety roles.

Course Content:

Day 1 – Introduction to Flare Systems

- Purpose and importance of flare systems in process safety.
- Overview of flare system components and configurations.
- Types of flare systems: elevated, ground, enclosed.
- Basic operational principles and flare system flow paths.
- Safety considerations and hazards associated with flaring.

Day 2 – Flare System Operation and Control

- Start-up, shutdown, and normal operating procedures.
- Flare gas recovery systems and reduction techniques.
- Flare gas flow measurement and monitoring.
- Combustion efficiency and smokeless flare operation.
- Troubleshooting common operational issues.

Day 3 – Environmental Compliance and Emissions Control

- Regulatory frameworks and environmental standards (e.g., EPA, local regulations).
- Types of flare emissions: CO₂, CO, VOCs, soot, NO_x, and sulfur compounds.
- Emission monitoring techniques and reporting requirements.
- Impact of flaring on air quality and environmental health.
- Strategies for emissions reduction and flare minimisation.

Day 4 – Flare System Maintenance and Reliability

- Preventive maintenance and inspection programs.
- Equipment integrity and reliability considerations.
- Managing flare system upsets and emergency situations.
- Root cause analysis of flare system failures.
- Best practices for ensuring system availability and performance.

Day 5 – Case Studies, Best Practices, and Future Trends

- Review of major flare system incidents and lessons learned.
- Industry best practices for flare operations and compliance.
- Advances in flare system technologies and monitoring.
- Role of digitalisation and automation in flare management.
- Course review, knowledge assessment, and personal action plans.

Course Agenda (Bilingual A/E):

(1st Day) Agenda

8.30	9.00	Opening Remarks (30 Min.).
9.00	11.30	<u>Discuss Course Major Points:</u> <ul style="list-style-type: none"> • Introduction to Flare Systems. • Flare System Operation and Control. • Environmental Compliance and Emissions Control. • Flare System Maintenance and Reliability. • Case Studies, Best Practices, and Future Trends.
11.30	12.00	Coffee Break
12.00	14.00	<u>Introduction to Flare Systems:</u> <ul style="list-style-type: none"> • Purpose and importance of flare systems in process safety. • Overview of flare system components and configurations. • Types of flare systems: elevated, ground, enclosed. • Basic operational principles and flare system flow paths. • Safety considerations and hazards associated with flaring.
14.00	14.30	Questions and Discussion
14.30		Buffet Lunch

(2nd Day) Agenda

9.00	11.30	<u>Flare System Operation and Control:</u> <ul style="list-style-type: none"> • Start-up, shutdown, and normal operating procedures. • Flare gas recovery systems and reduction techniques. • Flare gas flow measurement and monitoring.
11.30	12.00	Coffee Break
12.00	14.00	<u>Flare System Operation and Control:</u> <ul style="list-style-type: none"> • Combustion efficiency and smokeless flare operation. • Troubleshooting common operational issues.
14.00	14.30	Questions and Discussion
14.30		Buffet Lunch

(3rd Day) Agenda

9.00	11.30	<u>Environmental Compliance and Emissions Control:</u> <ul style="list-style-type: none"> Regulatory frameworks and environmental standards (e.g., EPA, local regulations). Types of flare emissions: CO₂, CO, VOCs, soot, NO_x, and sulfur compounds. Emission monitoring techniques and reporting requirements.
11.30	12.00	Coffee Break
12.00	14.00	<u>Environmental Compliance and Emissions Control:</u> <ul style="list-style-type: none"> Impact of flaring on air quality and environmental health. Strategies for emissions reduction and flare minimisation.
14.00	14.30	Questions and Discussion
14.30		Buffet Lunch

(4th Day) Agenda

9.00	11.30	<u>Flare System Maintenance and Reliability:</u> <ul style="list-style-type: none"> Preventive maintenance and inspection programs. Equipment integrity and reliability considerations. Managing flare system upsets and emergency situations.
11.30	12.00	Coffee Break
12.00	14.00	<u>Flare System Maintenance and Reliability:</u> <ul style="list-style-type: none"> Root cause analysis of flare system failures. Best practices for ensuring system availability and performance.
14.00	14.30	Questions and Discussion
14.30		Buffet Lunch

(5th Day) Agenda

9.00	11.30	<u>Case Studies, Best Practices, and Future Trends:</u> <ul style="list-style-type: none"> Review of major flare system incidents and lessons learned. Industry best practices for flare operations and compliance. Advances in flare system technologies and monitoring.
11.30	12.00	Coffee Break
12.00	14.00	<u>Case Studies, Best Practices, and Future Trends:</u> <ul style="list-style-type: none"> Advances in flare system technologies and monitoring. Role of digitalisation and automation in flare management. Course review, knowledge assessment, and personal action plans.
14.00	14.30	Questions, Discussion & Conclusion Training Course.
14.30		Buffet Lunch