



**BUREAU  
VERITAS**

# HAZARD IDENTIFICATION STUDY (HAZID)

A Powerful Tool for Identifying Major Hazards and Risk Issues

## BUSINESS CHALLENGE

Most government licensing authorities require operating companies to carry out Health, Safety and Environmental (HSE) hazard identification (HAZID) studies during the design of facilities, as well as prior to construction and during operation. Company corporate requirements also cover HAZID studies.

Hazard studies carried out late in the design phase, such as Hazard and Operability Studies (HAZOP), often identify safety and environmental issues that can cause project delays or costly design changes. Therefore, many clients require a HAZID study during early design so that hazards can be avoided or reduced.

## SOLUTION

### What is HAZID?

A HAZID study is a tool for hazard identification used early in a project as soon as process flow diagrams, draft heat & mass balances, and plot layouts are available. Sources of external hazard, such as existing site infrastructure, weather, and geotechnical data, are also required. The method is a design-enabling tool, acting to help organise the HSE deliverables in a project. The structured brainstorming technique typically involves the designer and client personnel engineering disciplines, project management, commissioning and operations. The major findings and hazard risk ratings help to deliver HSE compliance, and form part of the project Risk Register required by many licensing authorities and company in-house standards.

### What are the key benefits?

A well-organised HAZID study activity will deliver a clear identification of hazards and safeguards at an early stage in the design of a facility. Team output helps to ensure that:

- Potential deviations from intended design function are identified and corrected;
- HSE hazards are revealed at an early stage in the project, before significant costs have been incurred;
- Hazards are recorded and actioned so that they can be avoided, mitigated or highlighted for further risk reduction measures during detailed design;
- Action responses are auditable by Management and Legislative Inspectorates;
- Design or Construction delays and budget over-runs are avoided;
- Fewer hazards remain unknown at commissioning & operation of plant.

## RELATED SERVICES

- Concept Safety Assessment
- Process Hazard Analysis
- Hazard & Operability (HAZOP) Study
- Layers of Protection Analysis (LOPA)
- Safety Integrity Level (SIL) Study
- RAM and Reliability studies
- HSE Management Systems
- Safety Cases
- SIMOPS Study
- Fire and explosion assessment
- Non-flammable Hazards Analysis
- Emergency Response Plans
- Design Optimisation and Decision Support



## WHY CHOOSE BUREAU VERITAS?

**Recognition** Founded in 1828, Bureau Veritas is a world leader specialising in conformity assessment services related to Quality, Health, Safety & Environment (QHSE).

Certified to ISO 9001 for all of its activities globally, Bureau Veritas is well known for its ability to adapt to changing client environments and situations, and for its commitment to providing leading solutions through quality service.

**Knowledge & Expertise** Through expert local teams and technical knowledge, Bureau Veritas are able to deliver packaged and targeted solutions and information, to support our clients' unique business requirements.

**Network** With a global network of over 900 locations in more than 140 countries, Bureau Veritas provides tailored solutions to clients throughout the world across a diverse range of industries.

## OUR APPROACH

Bureau Veritas believes that hazard study is an integral part of the feasibility study and design of hazardous facilities.

Bureau Veritas supplies all of the administrative arrangements for hazard studies, including the meeting's Chairman and Secretary, the computer software support and offsite meeting venues, if appropriate.

Our Hazard Register tool simplifies both the identification of hazards and compilation of a Hazards Register.

The company provides consistent reporting formats and action response auditing to ensure that issues have been addressed to meet the project schedule.

## FAQ – FREQUENTLY ASKED QUESTIONS

### How long does a HAZID take?

For the installation of an oil & gas unit on an existing site, typically 2 to 5 days.

### Can you advise what types of hazard study are required for a project in our location?

Yes, we can advise on legislative requirements and good practice compliance.

## CLIENT REFERENCES

Bureau Veritas has delivered HAZID studies to major operators in all regions of the world. Our HAZID studies are tailored to meet the precise needs of each client situation – from LNG storage in UK to high H<sub>2</sub>S gas plant in China, and from deep water operations of Brazil to refinery turnaround in the USA.

For example, during turnaround we provide an approach to risk management through a HAZID process which accounts for interactions between different contractor groups. This approach provides a comprehensive picture of the risks during turnaround.

The top-down nature of the HAZID process means that it is likely to identify the fullest range of hazards to which personnel may be exposed.

Appropriate management measures are then developed and the effectiveness of the implementation is monitored.

## CONTACT

For details about this service, please contact Risk Management Services Aus & NZ

### Phone Australia:

Melb HQ: + 61 (0) 3 9922 0700

Perth: + 61 (0) 8 9481 0100

Phone New Zealand: + 64 (09) 526 4546

## FOR MORE INFORMATION

**Please Visit:** [www.bureauveritas.com.au](http://www.bureauveritas.com.au)

**Email:** [bvaus@au.bureauveritas.com](mailto:bvaus@au.bureauveritas.com)