BUSINESS CHALLENGE

Most government licensing authorities require operating companies to carry out Health & Safety and Environmental (HSE) studies during the design of facilities, as well as prior to construction and during operation.

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 hazard study during early design so that hazards can be avoided or reduced.

SOLUTION

What is HAZID?
HAZID study is a tool for hazard identification, used early in a project as soon as process flow diagrams, draft heat and mass balances, and plot layouts are available. Existing site infrastructure, weather, and geotechnical data are also required, these being a source of external hazards.

The method is a design-enabling tool, acting to help organise the HSE deliverables in a project. The structured brainstorming technique typically involves designer and client personnel engineering disciplines, project management, commissioning and operations. The main findings and hazard ratings help to deliver HSE compliance, and form part of the project Risk Register required by many licensing authorities.

What are the key benefits?
A well-organised HAZID study activity will deliver a good identification of hazards and safeguards at an early stage in the design of a facility. Team output helps ensure that:
- 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 during design;
- Action responses are auditable by Management and Legislative Inspectorates;
- Design or Construction delays and budget over-runs are avoided;
- Fewer hazards remain un-revealed at commissioning & operation of plant.

WHY CHOOSE BUREAU VERITAS?

Bureau Veritas has planned and delivered over 500 HAZID’s and similar studies worldwide, by engineers and technologists who understand your business and culture. Bureau Veritas has 8 technical centres and many other offices in regions where oil & gas companies have exploration, production, storage, and distribution facilities, enhancing Bureau Veritas’ delivery of effective hazard studies.

Bureau Veritas also provides personnel to participate in HAZID studies as discipline engineer or independent HSE specialist when that is appropriate to the client or designer.

RELATED SERVICES
- Feasibility and Concept study
- Process Safety Management
- Safety case services
- HAZOP & Process Hazard Analysis
- HSEQ Project Management
- Safety Related Systems & SIL evaluation
- Fire and explosion assessment
- Firewater systems design review
- Emergency response & ESSA studies
- Cost-benefit analysis
OUR APPROACH

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

Bureau Veritas supplies all of the administrative arrangements for hazard studies, including the meetings Chairman and Secretary, and also the computer software support and offsite meeting venue 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

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 is required for a project in our location?
Yes, we can advise on legislative requirements and good practice compliance.

CASE STUDY

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 H2S 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 topdown 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.