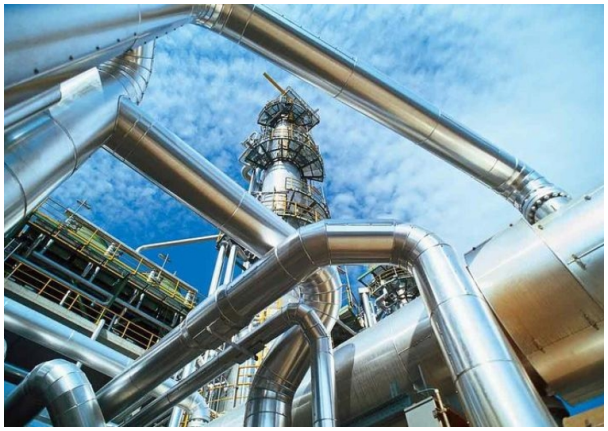
Contact: info@applus.com

Process Hazards Analysis (PHA) Services

Hazard and operability (HAZOP) analysis is a structured technique for performing a systematic hazard analysis and risk assessment of a process, such as in a pipeline safety management system under specific API codes. A HAZOP analysis utilises guide words to discover how deviations from the intended design may occur and how in such case these would result in a hazard. Hazard risk management is important because it allows a potential problem to be assessed, managed and mitigated. As part of this, a PHA audit can also provide important input for management, written procedures and incident investigation.



THE Applus+ SOLUTION

Applus+ offers unique solutions in hazard identification and risk control using a number of robust techniques in process safety management, supported by software tools. Hazards are ranked on a 5x5 risk matrix where the hazard level is indicated by one number and one letter. The letter represents the frequency of occurrence and the number represents the level of severity.

Applus+ has developed proprietary software for process hazard analysis called VAIL-HAZOP for HAZOP analysis and studies. Our experts in process safety management developed VAIL-HAZOP using API 750, API 14J and API 1150 as reference documents for PSM audit.

The key features of the VAIL-HAZOP which assist clients for the hazard analysis and risk assessment of their projects are:

- Windows-based application, easy-to-use with attractive Graphical User Interface
- Project team and session recording, and dynamic reporting with respect to project and facility
- Nodes data and scenario recording

- Dynamic action sheets and worksheet generation
- Strong security policy, password-enabled to avoid unauthorised access
- Analysis summary
- Action and task allocation with status and priority ranking
- Hazard and operability analysis is of greatest benefit during the design or installation of any new plant or process, or during major modifications;
- Hazard analysis and risk assessment are also required when there are operational hazards such as environmental, quality or cost issues; following a major incident involving a fire, explosion, toxic release, etc.; or to justify why a particular code of practice, guidance note or industry code does not need to be followed.