

Design Safety Alert 25-92 Preparation for a HAZOP Study

Summary:

To address recurring issues during HAZOP (Hazard and Operability Study) sessions, it is imperative to ensure that the design is thoroughly developed before the reviews. This Alert highlights common failings observed and suggests remedies to ensure the effectiveness of HAZOP sessions. Most recently HAZOP session had to be aborted due to insufficient design development, leading to wasted time and effort for all participants.

Common Findings:

- Design not sufficiently developed - the designers were unable to explain how the main process works and which instruments control which pumps/dosing etc.
- Not all attendees are familiar with the proposed design - the main concerns are some of the Client's staff have not been involved with the design development and have tried to turn the study into a Design Review.

Remedy

The process control philosophy of the complete system must be developed to explain the actions of the key parts of the plant prior to HAZOP study.

In addition, a Design Review shall be undertaken at least 2 weeks before the HAZOP to run through the design and ensure all parties are familiar with the proposal. This will allow a time to incorporate any agreed proposals from The Design Review meeting into the design presented for HAZOP.

Conclusion

It is crucial that all design elements are fully developed and reviewed in advance to avoid disruptions during HAZOP sessions. This proactive approach will save time, ensure thoroughness, and improve the overall effectiveness of the safety studies.



