

Why is it important to be ‘HAZOP ready’?

The end of the HAZOP process is closeout; something which is often neglected. In this article we talk about what we’ve learned from HAZOP closeout, and why ignoring it can be at your peril!

Firstly, our starting point is after the study has ended, and everyone has often got other things on their mind. The HAZOP action due date becomes imminent, and actions have not been addressed. Unfortunately, this can’t be fired back up the chain of command, so the person allocated the action has no choice but to get on with it.

So why shouldn’t you let your actions slide?

It’s worthwhile saying that a HAZOP facilitator will not raise actions unless they think they’re necessary. If you’re given a HAZOP action to close but you weren’t part of the HAZOP team and don’t think it’s a priority, it’s important to remember that the team did. So, it needs addressing.

Secondly, designs change (hopefully not without management of change) and details get missed. The item that the HAZOP team recommended (e.g., include a second, dissimilar non-return valve in the line) might have been included already. But it’s still important to answer the action.

It’s also worthwhile saying that if recommendations aren’t implemented, the risk reduction they offer has not been realised. This might still leave you in the intolerable region. Surely no-one would operate their facility with intolerable risk? It does happen; we’ve seen it. ALARP waivers do not risk reductions make.

Thirdly, time flies, whether you’re having fun or not. Trying to pick up old actions, trace back the paperwork, find out what’s been done, how, by whom, and to what specification takes a long time or costs you money. We have been involved in legacy HAZOPs that took nine months to close because we had to find all the information and go to site to survey what had been done, determine if it met the requirements of the action and if it didn’t, evaluate whether what had been done was sufficient. It is an expensive way to close things out.

When we HAZOP something that has been subjected to HAZOP study previously, the first thing to ask is what actions have not been closed out and what evidence there is to support those that have. It is nearly always spreadsheet based and lacking evidence. Although not usually with EPCs. They’re very good at this and they get paid to provide HAZOP close-out reports. It’s operators of facilities, who are often the guilty party.

So, you’ve had a HAZOP and actions were raised. What now? Our recommendations are as follows:

1. Set a time to review the actions in a careful and diligent manner. What does it ask for? Why was it asked for? Look at the HAZOP report, it will give you guidance. If need be, contact the facilitator and ask if they can give you some pointers, they may be able to help you and it probably won’t cost.
2. Keep a HAZOP action response log. It keeps the actions and the evidence you gather to support close-out together and is easily handed over to someone lucky enough to take over ownership.
3. Engineering managers: hold a monthly review of progress. Set a deadline for completion. Two weeks isn’t going to be sufficient. Ensure there is sufficient resource to allow timely and diligent completion.
4. Engineering managers again: insist on a HAZOP closeout report which contains the required evidence. File it in your document control system with a proper title and document number so you can find it again.

Finally, all this work requires coordination. It’s a superb job for a graduate engineer or a student and they don’t cost much. If you’re the coordinator, sitting on someone’s desk until they agree a time to speak to you about action close-out is extremely effective; emails get ignored.

Good luck, and if you need any advice, then 6 Engineering are here to help!

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